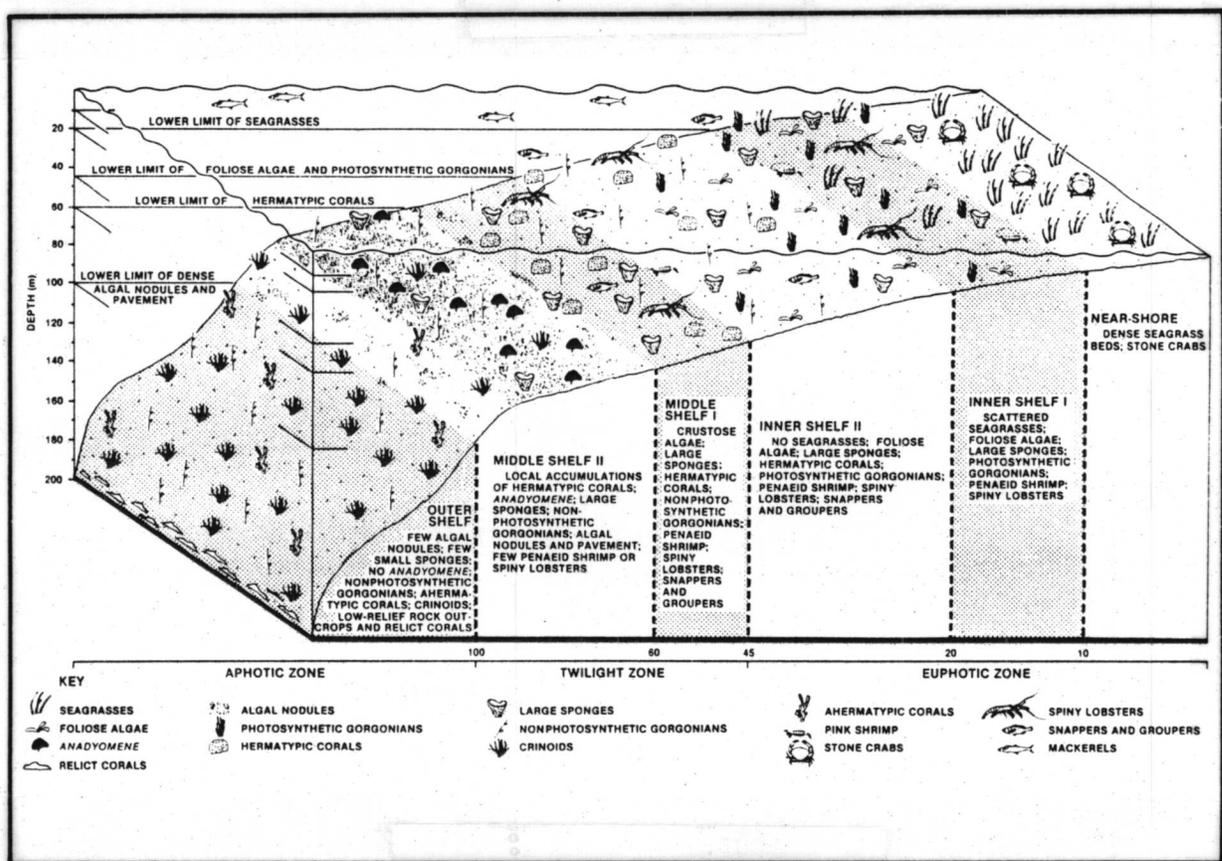


Southwest Florida Shelf Ecosystems Study

Volume III: Annotated Bibliography

Part A (A-K)



Southwest Florida Study Ecosystems Study

Volume III: Annotated Bibliography

Part A (A-K)

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1.0 INTRODUCTION

The objective of the Southwest Florida Shelf Ecosystems Study was to synthesize all field data (collected during the 5-year field study) and data from other sources in order to produce a concise, coherent description of the biota conditions and processes in the study area. This description provided MMS with the information necessary to allow informed decisionmaking for critical offshore development issues that fall within MMS's offshore leasing responsibilities. Throughout the first five years of the program, approximately 24 volumes (8,000 to 10,000 pages) of information were provided to MMS. This information, although critical to the program, was somewhat limited in value to decisionmakers because of its sheer volume. Consequently, the objective of the Year 6 study was to summarize, interpret, and synthesize this large data set to provide detailed descriptions of the systems and processes on the Florida shelf, and use this information to assess potential impacts of offshore development that can be directly used for stipulations and guidelines for developing Florida's offshore resources. A further objective was to assure that all available data were identified and considered before final assessments were made, and that any differences or data gaps were identified before development plans were approved or finalized. The information collection task of the Year 6 study was implemented to meet this final objective.

The methods used in the information collection effort and a copy of the bibliography that resulted from this effort are presented in this volume. The synthesis methods and the results of the synthesis effort are described in Volumes I (Executive Summary) and II (Synthesis Report).

An Information Collection Plan was designed to ensure that relevant information was collected in an efficient and cost-effective manner and with the proper emphasis relative to the overall goals of the program.

This plan, the information sources, topics, a description of the Annotated Information System, and National Oceanographic Data Center (NODC) data submission procedures are discussed in the following sections.

2.0 INFORMATION COLLECTION PLAN

An inherent problem in any information collection effort is the tendency for that effort to get out of control, resulting in the depletion of available funds and yet not meet the original program goals. To avoid this problem, an Information Collection Plan was devised. The first phase of this plan was to conduct a Program Initiation Workshop where the Principal Investigators, as well as representatives from the Minerals Management Service (MMS), U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and the Florida Governor's Office, met to present and discuss possible valued ecosystem components (VECs) which would define the various conceptual submodels. The VECs chosen by the attendees of this meeting also were used to direct the information collection effort.

The next step of the Information Collection Plan was to determine the limits for information collection. Spatial, temporal, and topical limits were used to control information collection. The spatial or geographic limits were varied, depending on the topic. The geographic limits for meteorology or physical oceanography delineated a larger area than the limits for biology or geology, for example. The geographic limits for this program were set as follows:

1. Biology, fisheries/socioeconomics, and geology--Seaward from the west coast of Florida (excluding estuaries such as Charlotte Harbor) to the 200-m isobath and from 27°N latitude to just below the Florida Keys (approximate latitude--24°30'N);

2. Meteorology, physical oceanography, and chemical oceanography--From a line lying as far inland as 20 km (in the case of meteorology) to longitude 85°W and from latitude 27°N to an approximate latitude of 24°30'N.

Because the biological communities in a specific region were being described, the limits for biology (as well as for fisheries/socioeconomics and geology) were more specific and delineated a smaller area. The limits for physicochemical and meteorological information, however, delineated a larger and less specific area. This is because certain physical phenomena, important to the biological communities, must be examined on scales at which these phenomena exist (e.g., Loop Current eddies).

The geographic limits, however, had to have some flexibility because strict adherence to them could have resulted in data gaps critical to synthesis. For example, descriptions of unique biological communities exist for the study area [e.g., the MMS reports for Years 1 through 5 (Woodward Clyde Consultants, 1983; Woodward Clyde Consultants and Continental Shelf Associates, Inc, 1984; Woodward Clyde Consultants and Skidaway Institute of Oceanography, 1983; Continental Shelf Associates, Inc., 1987; Environmental Science and Engineering, Inc. and LGL Ecological Research Associates, Inc., 1985; and Danek and Lewbel, 1986)]. However, no data (other than laboratory tests) exist on the effects of drilling fluid discharges on these communities. Therefore, data from other locales were included, thus exceeding the geographic limits for certain topics.

Temporal limits extended from the earliest available information to the present. The Annotated Information System includes information from ongoing projects as well.

Topical limits were more difficult to set. Limits used in this study were based on the guidelines established by Mahadevan et al. (1984) in the preparation of their bibliography. These limits were that behavioral, morphological, or taxonomic studies of single species would be de-emphasized, unless these species were designated as VECs. Unlike Mahadevan et al. (1984), method descriptions were de-emphasized unless site specific. These topical limits precluded overloading the Annotated Information System with data that, although important, were not germane to the overall goals of this program.

As the information collection continued, the necessity for certain special inclusions and exclusions became evident. The geographic limits as set forth in the RFP, particularly the easternmost geographic limit (i.e., the west coast of Florida), required that marine, estuarine, or intertidal information for certain Florida counties be included. These counties included: Sarasota, Lee, Collier, Charlotte, Monroe (which includes the majority of the references on Florida Bay), and the gulf-side references for Dade.

Certain generic references were included because of their topical content and regardless of their geographic limits. These special inclusions included: any discussions of hydrocarbons in the marine environment (water column, sediments, and biota), the effects of drilling or drilling fluids and cuttings, the effects of offshore oil and gas development, discussions regarding biological processes or communities and the physical processes that affect each, important pelagic fishes (e.g., billfishes), and reports presenting the results of similar studies.

In an effort to contain the size of the Annotated Information System, certain topics were excluded unless geographically relevant, such as estuaries, mangroves, marshes, intertidal zones, and littoral zones. The exclusion of these references for all but the six counties (previously discussed) resulted in as much as 20% reduction in the size of the

Annotated Information System. This is particularly important because the Annotated Information System was installed on a microcomputer hard-disk drive to ensure greater flexibility for MMS.

An Information Collection Log was used by information collection personnel. The purpose of this log was threefold: (1) to ensure uniformity in collection techniques of the three contractors, (2) to ensure that all information that must accompany any references or data for submission to the Annotated Information System is obtained, and (3) to enable personnel to enter information into the Annotated Information System directly from the log.

The Information Collection Log contains the following information:

1. Author, publication date, and title;
2. Publication information;
3. Key words;
4. Abstract;
5. Geographic location for study (including latitude, longitude, Marsden squares, and geographic place names);
6. Type and time of data collection and number of stations;
7. Availability, location, and contact (primary and secondary) for data;
8. Description of data processing methods, format of data, and estimate of data quality; and
9. Project personnel making contact and how and when contact was made.

3.0 INFORMATION SOURCES

Numerous databases, agencies, institutions, private companies, and individuals were investigated as potential sources of relevant information. The majority of the information was obtained from existing databases or literature, although telephone calls and visits to specific individuals or agencies were occasionally used to collect information:

As expected, the majority of the site-specific information was contained in the reports authored by Woodward Clyde Consultants, Continental Shelf

Associates, Inc., Environmental Science and Engineering, Inc., and LGL Ecological Research Associates, Inc. for Years 1 through 5 of the Southwest Florida Shelf Ecosystems Program. In addition to these reports, other publications provided relevant information or lists of other publications that might be relevant. These publications included:

1. Mahadevan et al. (1984);
2. Barry A. Vittor and Assoc., Inc. (1985);
3. Florida Department of Administration (1975);
4. Science Applications International Corp. (1986);
5. Science Applications International Corp. (1987);
6. Alexander et al. (1977);
7. Jones et al. (1973);
8. The State University System of Florida Institute of Oceanography (1974);
9. Woodward Clyde Consultants and Continental Shelf Associates, Inc. (1982);
10. Boesch and Rabalais (1985); and
11. Minerals Management Service (1983).

The basis for this project's Annotated Information System was the references contained in the Tuscaloosa Trend's bibliography provided to Environmental Science and Engineering, Inc. by MMS on microcomputer diskettes. The 1,106 references contained on these diskettes were transferred into the Annotated Information System; 657 were deleted because they were considered not relevant to the Southwest Florida Shelf Ecosystems Program. Although approximately 60% of the references were deleted, the project was saved effort and cost because the 449 entries retained would have required a considerable amount of time to enter manually into the Annotated Information System.

In addition, 559 references from the Mote Marine Laboratory bibliography (Mahadevan et al., 1984) were added to the Annotated Information System. These references were chosen either because they were topically or geographically relevant to this program. Many of the county-specific references were obtained from this bibliography.

The remainder of the information was obtained from libraries, computerized literature searches, searches of existing agency databases, and visits to various agencies and institutions. A search of the various libraries produced nearly 200 additional references not included in the previously mentioned sources. The majority of these references included some of the most current information available.

Additional information was obtained from databases accessed using the Lockheed DIALOG Information Retrieval Service. DIALOG currently accesses more than 220 databases containing in excess of 110 million records. The databases accessed (and the number of "hits" using the key words gulf, Mexico, shelf) are presented below:

1. AQUATIC SCIENCE ABSTRACTS (186),
2. BIOSIS PREVIEWS (54),
3. CHEMICAL EXPOSURE (20),
4. DOE ENERGY (339),
5. ENVIROLINE (34),
6. ENVIRONMENTAL BIBLIOGRAPHY (7),
7. FEDERAL RESEARCH IN PROGRESS (10),
8. FLUIDEX (12),
9. GEOARCHIVE (258),
10. LIFE SCIENCES COLLECTION (24),
11. MET/GEOASTRO ABSTRACTS (55),
12. NTIS (176),
13. OCEANIC ABSTRACTS (159),
14. P/E NEWS (678),
15. POLLUTION ABSTRACTS (10),
16. SCISEARCH(39),
17. SSIE CURRENT RESEARCH (31),
18. TRIS (14),
19. WATER RESOURCES ABSTRACTS (137), and
20. ZOOLOGICAL RECORD (45).

Of these databases, Numbers 1, 3, and 7 produced no hits until the key word "shelf" was excluded. Additional key words (e.g., environmental) were used to reduce the total number of hits and increase the level of relevance for database Numbers 4, 9, 12, and 14. The remainder of the database references were printed as offline abstracts without any additional manipulation.

A special DIALOG search was conducted for information of the biological effects of offshore drilling. The key word used was "offshore drilling". The choice of databases rather than key words was used to increase the relevance of the articles retrieved. These databases included:

1. BIOSIS PREVIEWS (26),
2. SCISEARCH (83),
3. LIFE SCIENCES COLLECTION (13),
4. CA SEARCH (100), and
5. ZOOLOGICAL RECORD (6).

If a database such as P/E NEWS had been searched using the key word "offshore drilling," there would have been a large number of hits; however, the relevancy of the articles would have been quite low (presumably emphasizing the engineering aspects of offshore drilling rather than the environmental aspects).

Another special DIALOG search was conducted for any information regarding the physical oceanography of the Gulf of Mexico. No geographic restraint was placed on the search other than it be limited to articles on the Gulf of Mexico. The key words used to conduct this search included: physical, oceanography, currents, waves, hurricane, density, loop, current, tides, and inertial. A search of the five most relevant databases (OCEANIC ABSTRACTS, NTIS, MET/GEOASTRO ABSTRACTS, DISSERTATION ABSTRACTS, and CONFERENCE PAPERS) yielded a total of 434 hits. A number of these articles were duplicated among these databases.

Computer or manual searches of various existing agency databases were conducted. The agencies included:

1. NODC;
2. National Climatic Data Center (NCDC);
3. National Geophysical Data Center (NGDC); and
4. U.S. Geological Survey (USGS).

Visits to various agencies, institutions, and private companies or organizations were conducted to obtain information not available from the previously described sources. These included:

1. U.S. Fish and Wildlife Service,
2. Minerals Management Service,
3. NOAA Atlantic Oceanographic and Meteorological Laboratories,
4. NOAA/NMFS Southeast Fisheries Center,
5. NOAA/NESDIS,
6. U.S. National Park Service,
7. U.S. Geological Survey,
8. Florida Department of Natural Resources,
9. Florida Institute of Oceanography,
10. University of South Florida,
11. Florida Department of Environmental Regulation,
12. Florida State University,
13. University of Florida,
14. University of Miami, and
15. Mote Marine Laboratory.

4.0 INFORMATION TOPICS

To meet the goals of this program, numerous data types or topics had to be synthesized. These data types included physical, geological, chemical, biological, and socioeconomic. The actual synthesis of information required slight differences in the delineation of categories to ensure goals were met. For information collection, the categories described previously were sufficient; discussions of each follow.

Physical Data

These data included meteorology, hydrography, and dynamic processes (atmospheric and marine phenomena). Specifically, meteorological data consisted of winds, temperature, barometric pressure, solar radiation, relative humidity, precipitation, and any other parameter considered essential for information synthesis. Hydrographic data included salinity, temperature, density, water transmissivity (e.g., depth of photic zone), and any other physical data germane to this program. The dynamic processes, both atmospheric and marine phenomena, included weather systems, winds, front propagation, storms, waves, ocean currents, upwellings, and dispersive and diffusive processes. Particular emphasis was placed on relatively short-time-scale phenomena such as Loop Current boundary perturbations and hurricanes. Although these last two phenomena

occur on a relatively short time scale in the study area, each can cause perturbations of considerable magnitude in the environment.

Chemical Data

These data included the dissolved gases (particularly oxygen), nutrients, yellow substance (Gelbstoff), trace and heavy metals, hydrocarbons, and other contaminants. In addition, chlorophyll and primary productivity data were collected, even though these data may be more properly considered biological. Chemical data for the atmosphere, water column, sediments, and biota were obtained.

Geological Data

Information topics included surface and subsurface geological features, the geologic history of the west Florida shelf, surficial sediment composition (grain size, percent carbonate, mineralogy, trace and heavy metals, hydrocarbon concentrations, etc.), and sediment dynamics (resuspension, bed load transport, etc.). The majority of the information specific to the study area was collected during the Years 1 through 5 investigations and, therefore, was readily accessible to the project team. Additional collections focused primarily on data that were useful for interpretation of benthic biological data and prediction of impacts related to oil and gas exploration and development--including information concerning spatial distribution patterns of different substrate types, dynamics of unconsolidated sediments, and sediment trace metals and hydrocarbon concentrations.

Biological Data

Topics for biological data collection included (1) benthic communities (infauna, epiflora, sessile epifauna, motile epifauna, and demersal fishes), (2) populations of commercially or economically important species (principal biota, many of which were designated VECs), (3) biologically sensitive areas, (4) finfish (including pelagic species) and shellfish populations, (5) endangered species, and (6) short-term

biological phenomena (e.g., red tides). Benthic biological data collection focused on spatial and seasonal patterns of species composition, abundance, and diversity, and relationships to environmental variables. Topics such as substrate affinities, trophic relationships, and sensitivity/tolerance to sedimentation--important factors through which oil and gas exploration and development impacts are likely to be mediated--received special attention during the collection process. Data concerning population locations of commercially or ecologically important species were compiled. These principal biota included major finfish and shellfish species harvested in the area as well as key habitat formers such as agariciid corals and seagrasses. Literature and data on locations of population centers and important habitat areas such as spawning or nursery grounds were identified for the key fish and shellfish species. Information concerning endangered or threatened species and critical habitats (e.g., nesting areas or migration routes) in and near the study area were compiled. Short-term biological phenomena, such as dinoflagellate blooms that are responsible for red tides, also were investigated. Records of total or near-total defaunation of reef communities have been reported following particularly intense red tides. The effects of these natural disasters (red tides, hurricanes, etc.) must be considered when discussing biological and physical processes on the southwest Florida shelf.

Socioeconomic Data

Information collection focused on fish and shellfish resources in relation to local economies. The most recent catch statistics available for southwest Florida coastal counties were compiled in terms of poundage and dollar values for major species landed. Data concerning locations and relative importance to local economies of major harvest areas in and near the study area were collected.

5.0 ANNOTATED INFORMATION SYSTEM

MMS required a system that could contain all available information collected during the data and literature search. This system must have the capability to:

1. Sort by key words, words in title, author, sampling location, and source;
2. Print out entire reference list as sorted above;
3. Print out only references that fit a series of criteria;
4. Count number of references that fit a series of criteria before printing them out; and
5. Have the ability to update.

Several existing formats for the database and manipulative programs, as well as the efficacy of developing a new format and manipulative program, were examined. Quantus, Inc., the Barry Vittor and Associates' subcontractor responsible for the Tuscaloosa Trend bibliography, was contacted to determine precisely which system they were using and whether it could be adapted to this project, thereby unifying two MMS databases. Quantus, Inc., had a database, but did not have a manipulative program (Farmer, 1985, personal communication). Because at that time MMS did not know which type of computer (microcomputer, minicomputer, or mainframe computer) onto which the system would be installed, Quantus Inc., had not developed specific software for MMS. During the interim period, Quantus, Inc., was using DBASE III to manipulate the database.

It was further determined that Quantus, Inc., was using the FAMULUS format. This format, part of the FAMULUS system, was developed in the 1960s and is still widely used by government agencies. FAMULUS (the program and format) was designed to process personal reference collections maintained by researchers. Nevertheless, its basic structure renders it suitable for a large number of other applications; for this purpose, FAMULUS can be regarded as a general-purpose text-handling system. FAMULUS will maintain many types of information files which can be broken into units or records with subcategories or fields that can be identified. The record may have up to 10 distinct fields. In

bibliographic files, the citation is the record, and fields are used for author, date, title, key words, abstracts, etc. The FAMULUS format requires that a record consist of 4,000 characters, regardless of the number of fields or actual characters required. Any unused characters become blanks.

FAMULUS was designed for minicomputers and had considerable power with respect to update capabilities, etc. Unfortunately, no program code could be located for FAMULUS. It is probable that FAMULUS cannot be adapted to a microcomputer. Because MMS had not specified the type of computer, the decision was made to model the Southwest Florida Shelf Ecosystems Program's information system after the one designed for the Tuscaloosa Trend. Therefore, although the FAMULUS format was chosen as the format for the database, a manipulative program compatible with a microcomputer was chosen. A microcomputer system was chosen because the hardware and software are less expensive than the hardware and software for a minicomputer or mainframe computer. For example, the cost for an off-the-shelf database program for a microcomputer is approximately \$600, whereas the cost for similar software for a minicomputer would have been approximately \$20,000. Existing software was chosen rather than attempting to develop software specific to this project. Mote Marine Laboratory had developed a microcomputer program for their bibliography (Mahadevan et al., 1984). The cost for this program, according to Mahadevan (1986, personal communication), was considerably more than anticipated (in the tens of thousands of dollars). Therefore, the decision was made to use off-the-shelf software instead of developing software specifically for the Southwest Florida Shelf Ecosystems Program.

After evaluating various available database manipulative programs, it was decided to use PCINFO rather than DBASE III. PCINFO was one of the few microcomputer data management systems capable of manipulating databases and records the size required by this project and the FAMULUS format, respectively. In addition, PCINFO was considered more user friendly

because it could be modified to use a variety of menus to guide the user through the system. Although PCINFO meets the minimum requirements of this project, improvements could be made. The edit features are cumbersome using this, or any microcomputer, database software. The problem results from the large size of the database (in excess of 6 megabytes) and the record size as dictated by the FAMULUS format (4,000 characters). These problems could be circumvented on a minicomputer or mainframe computer; this however, would have resulted in MMS purchasing expensive software and hardware. Therefore, the approach was considered the most cost-effective compromise. Although the system is somewhat awkward, it is reasonably inexpensive, and hardware in the form of drives and microcomputers was readily available.

The Annotated Information System currently consists of the database (in FAMULUS format), a modified menu-driven version of PCINFO, and a Seagate 20-megabyte external hard disk drive. This system was transferred to MMS where it can be connected with any compatible microcomputer.

The system's current capabilities include:

1. Addition of new records;
2. Deletion of unwanted records;
3. Editing of existing records;
4. Searching by accession number, author, date, and key word;
5. Sorting alphabetically by author or numerically by accession number; and
6. Printing of all or selected records in brief or extended format.

New records are added through manual keyboard entry. Deletion is accomplished using known accession numbers; however, this is a slow process because the system resorts the entire database after each deletion. The edit feature, as mentioned previously, is the most cumbersome. Currently, editing consists of re-entering entire lines within a field. The program as it exists cannot perform editing like a word processor (e.g., single deletions, insertions, type-overs, text moving, etc.). The search option provides considerable flexibility with

regard to the fields chosen to search and the format of key words. The maximum number of key words allowed is 15. The key words currently being used in the key word field of the system are presented in Table 5.1. After the search has been completed, the system will print out each record on a separate page (in the extended format) or four records per page in the brief format.

6.0 NODC SUBMISSIONS AND DATA MANAGEMENT

Data management and submission of relevant data to NODC were included as part of the Information Collection Task. This sub-task involved identification, evaluation, and procurement of data sets (provided that the data were amenable to conversion to NODC format). This criterion for submission to NODC was established to ensure that this subtask did not exhaust the budget for the entire project.

Potential data sets were identified from several sources, including the articles already contained in the Annotated Information System, the existing "Report of Observations/Samples Collected by Oceanographic Programs (ROSCOP) Second Edition" forms listed in Ralph Childers Associates (1984), and interviews conducted either in person or via telephone. Information collection personnel, using the Information Collection Log described previously, attempted to obtain the all of the following data-specific information:

1. Geographic location (in the form of latitude/longitude, place names, NEDRES codes, Marsden Squares),
2. Data type,
3. Sampling methods,
4. Number of stations,
5. Earliest and latest or completion date of sampling,
6. Sampling frequency,
7. Data availability (nonproprietary, proprietary, primary and secondary contact name, address, and telephone number),
8. Data processing and analysis methods,
9. Data quality estimate, and
10. Data format or products.

Table 5.1 Southwest Florida Shelf Ecosystems Program keyword list.

ABUNDANCE	BIOLOGY	COLLIER
AERIAL SURVEY	BIOMAGNIFICATION	COLONIZATION
AGARCIA	BIOMASS	COMMENSAL
AIR PRESSURE	BIOTA	COMMERCIAL FISHERY
AIR TEMPERATURE	BIRD	COMMUNITY
ALGAE	BLUE CRAB	COMMUNITY STRUCTURE
ALGAL NODULE	BOAT	CONTINENTAL MARGIN
ALIPHATIC COMPOUNDS	BOD	CONTINENTAL SHELF
ALKALINITY	BOTANY	CONTINENTAL SLOPE
ALLIGATOR	BOTTOM CURRENT	COPPER
AMINO ACIDS	BOTTOM PRESSURE	CORAL
AMMONIA	BOTTOM SEDIMENT	CORALLINE
ANADYOMENE	BREEDING	CRAB
ANCHOR DAMAGE	BREEDING CYCLE	CRINOID
ANNELIDA	BROWN SHRIMP	CRUDE OIL
ANNELID	CADMIUM	CRUSTACEA
AROMATIC COMPOUNDS	CALCIUM	CRUSTACEAN
ARTHROPOD	CALCIUM CARBONATE	CURRENTS
ARTHROPODA	CALICO SCALLOP	CUTTING
ARTIFICIAL HABITAT	CALORIC CONTENT	DADE
ARTIFICIAL REEF	CARBOHYDRATES	DECAPOD
ASSEMBLAGE	CARBON	DECAPODA
ATMOSPHERIC CIRCULAT	CARBON-14	DEFAUNATION
ATP	CARBONATE	DEMERSAL FISH
AVES	CAROTENOIDS	DEPOSITION
BACTERIA	CATCH STATISTICS	DEPTH
BARIUM	CETACEA	DETRITUS
BAROMETRIC PRESSURE	CETACEAN	DEVELOPMENT
BARRIER ISLAND	CHARLOTTE	DIAPIR
BASELINE STUDY	CHEMICAL	DISASTER
BATHYMETRY	CHEMICAL OCEANOGRAPH	DISEASE
BAY	CHEMISTRY	DISSOLVED OXYGEN
BED FORM	CHLORINE COMPOUNDS	DISTRIBUTION
BEHAVIOR	CHLOROPHYLL	DIVERSITY
BEHAVIORAL	CHROMIUM	DO
BENTHIC	CHRONOLOGY	DOLPHIN
BENTHIC COMMUNITY	CIRCULATION	DREDGE SPOIL
BENTHIC FAUNA	CLAY MINERALOGY	DREDGING
BENTHIC FLORA	CLIMATIC DATA	DRIFT ALGAE
BENTHOS	CLIMATOLOGY	DRIFT BOTTLE
BIBLIOGRAPHY	COASTAL	DRIFT CURRENTS
BILLFISH	COASTAL MORPHOLOGY	DRIFT MEASUREMENT
BIOACCUMULATION	COASTAL RESOURCE	DRIFT PATTERN
BIOASSAY	COASTAL WATER	DRILL CUTTING
BIOGEOGRAPHY	COASTAL ZONE	DRILLING
BIOLOGICAL	COELENTERATE	DRILLING FLUID

DRILLING IMPACT
DRILLING MUD
DRILLING PLATFORM
DRILLING RIG
DYNAMIC HEIGHT
ECHINODERM
ECHINODERMATA
ECOLOGICAL
ECOLOGY
ECONOMICS
ECOSYSTEM
EDDY
EDDY FORMATION
EDDY INTRUSION
EH
ELECTRICAL CONDUCTIV
ENDANGERED SPECIES
ENERGY FLUX
ENGINEERING
EPIBIOTA
EPIFAUNA
EPIFLORA
EROSION
ESTUARY
EUSTATIC CHANGE
EVAPORATION
EVOLUTION
EXPLORATION
FATTY ACID
FAULT
FAUNA
FECUNDITY
FEEDING HABIT
FISH
FISH ATTRACTION
FISH CATCH
FISH EGG
FISH HARVESTING
FISH KILL
FISH LARVAE
FISH STATISTICS
FISH STOCK
FISH TAG
FISH TRAP
FISHERY
FISHERY STATISTICS
FISHING
FISHING EFFORT
FISHING GEAR
FISHING GROUND
FISHING INDUSTRY
FISHING PRESSURE
FLATFISH
FLORA

FOOD CHAIN
FOOD HABIT
FORAMINIFERA
FORECASTING
FORMATION WATER
FOULING
FOULING ORGANISM
FRACTURE PATTERN
GAS
GEOCHEMICAL
GEOCHEMISTRY
GEOGRAPHIC
GEOGRAPHICAL
GEOGRAPHY
GEOLOGIC HISTORY
GEOLOGIC STRUCTURE
GEOLOGICAL
GEOLOGY
GEOMORPHOLOGY
GEOPHYSICAL
GEOSYNCLINE
GEOTHERMAL
GLOBAL RADIATION
GORGONIAN
GRAIN SIZE
GRASSBED
GROUPER
GROWTH
GYRAL
GYRE
HABITAT
HEAT BUDGET
HEAT STORAGE
HEAVY METAL
HEAVY MINERAL
HERBICIDE
HERPETOFAUNA
HISTOLOGY
HISTORIC
HISTORIC GEOLOGY
HOLE
HOLOCENE
HORMONE
HOURGLASS
HURRICANE
HURRICANE DAMAGE
HYDROCARBON
HYDROGRAPHIC
HYDROGRAPHY
HYDROID
HYDROLOGICAL
HYDROLOGY
HYDROZOA
HYPOXIA

ICHTHYOFAUNA
ICHTHYOPLANKTON
INDUSTRY
INFAUNA
INFAUNAL
INFAUNAL COMMUNITY
INFECTIOUS DISEASE
INFRARED IMAGERY
INORGANIC COMPOUND
INTERNAL WAVE
INTERTIDAL
INTRUSION
INVERTEBRATA
INVERTEBRATE
INVERTEBRATE LARVAE
IRON
IRRADIANCE
ISOTOPE RATIO
JUVENILE
KAOLINITE
KING MACKEREL
LAND-SEA BREEZES
LANDINGS (POUNDS)
LANDINGS (VALUE)
LANDSAT
LARVAE
LARVAL
LARVAL DEVELOPMENT
LATITUDE
LATITUDINAL
LEAD
LEE
LENGTH
LIFE CYCLE
LIFE HISTORY
LIGHT
LIGHT ATTENUATION
LIGHT EXTINCTION
LIGHT INTENSITY
LIGNIN
LIPID
LITHOLOGY
LIVE BOTTOM
LOOP CURRENT
MACROALGAE
MACROFAUNA
MACROPHYTE
MAFLA
MAGNESIUM
MAMMAL
MAMMALIA
MANAGEMENT
MANATEE
MANGANESE

MARICULTURE	OIL AND GAS	POPULATION
MARINE	OIL EXPLORATION	POPULATION COMPOSITI
MARSH	OIL INDUSTRY	POPULATION DENSITY
MATHEMATICAL MODEL	OIL RESIDUE	POPULATION DYNAMICS
MEIOFAUNA	OIL SLICK	PORIFERA
MERCURY	OIL SPILL	PORIFERAN
METABOLISM	OIL TRANSPORT	PORPOISE
METAL	OIL WELL	PORT
METEOROLOGICAL	OPERATIONS	POTASSIUM
METEOROLOGY	ORGANIC CARBON	PRECAMBRIAN
MICROFAUNA	ORTHOPHOSPHATE	PRECIPITATION
MIGRATION	OXYGEN	PREDATION
MIGRATORY PATTERN	OYSTER FISHERY	PREHISTORIC
MINERAL	OYSTER	PRESSURE
MINERAL RESOURCE	PALEOZOIC	PRIMARY PRODUCTION
MINERALOGY	PARASITE	PRIMARY PRODUCTIVITY
MODEL	PATHOLOGY	PRODUCED WATER
MODIFICATION	PCB	PRODUCTION
MOLLUSC	PELAGIC FISH	PRODUCTION WATER
MOLLUSCA	PELECYPOD	PRODUCTIVITY
MOLLUSCAN	PELECYPODA	PROTEIN
MOLLUSK	PESTICIDE	PURSE SEINER
MONITORING	PETROLEUM	QUATERNARY
MONROE	PET HYDROCARBON	RADIOMETER
MONTMORILLONITE	PH	RATE
MORPHOLOGY	PHENOLOGY	RECREATION
MORTALITY	PHOSPHATE	RECREATIONAL BEACH
MUD	PHOSPHORUS	RECREATIONAL FISHERY
MULLET	PHOTODOCUMENTATION	RECREATIONAL FISHING
MULTIVARIATE ANALYSI	PHOTOGRAPH	RECRUITMENT
NEARSHORE	PHOTOSYNTHESIS	RED TIDE
NEKTON	PTHALATE	REDFISH
NEPHELOID LAYER	PHYSICAL	REDOX
NESTING	PHYSICAL OCEANOGRAPH	REEF
NEUSTON	PHYSICAL PROCESS	REEFFISH
NICKEL	PHYSICAL PROPERTY	REHABILITATION
NITRATE	PHYSIOGRAPHY	RELATIVE HUMIDITY
NITRITE	PHYSIOLOGICAL	REMOTE SENSING
NITROGEN	PHYSIOLOGY	REPRODUCTION
NUMERICAL MODEL	PHYTOPLANKTON	REPRODUCTIVE
NURSERY AREA	PIGMENT	REPTILIA
NUTRIENT	PINK SHRIMP	RESERVE
OCEANOGRAPHIC	PINNIPED	RESOURCE
OCEANOGRAPHY	PIPELINE	RESPIRATION RATE
OCS	PLANKTON	RICHNESS
OCTOCORALLIA	PLANKTON BLOOM	RIVER DISCHARGE
OFFSHORE	PLATE TECTONICS	ROCK SHRIMP
OFFSHORE DRILLING	PLEISTOCENE	SALINITY
OFFSHORE EXPLORATION	POLLUTANT	SARASOTA
OFFSHORE LEASE	POLLUTION	SATELLITE
OFFSHORE MINERALS	POLLUTION CONTROL	SCLERACTINIA
OFFSHORE PLATFORM	POLLUTION DISTRIBUTI	SCLERACTINIAN
OFFSHORE WATER	POLYCHAETA	SCYPHOZOA
OIL	POLYCHAETE	SEA LEVEL

SEA STATE
SEA TROUT
SEA WHIP
SEABIRD
SEAFOOD
SEAGRASS
SEAGRASS COMMUNITY
SEASAT
SEASON
SEASONAL
SEASONAL VARIATION
SEASONALITY
SEASONALLY
SECCHI DISC
SEDIMENT
SEDIMENT ANALYSIS
SEDIMENT DISTRIBUTIO
SEDIMENT FACIES
SEDIMENT GRAIN SIZE
SEDIMENT STRUCTURE
SEDIMENT TEXTURE
SEDIMENT TRANSPORT
SEDIMENTARY DEPOSIT
SEDIMENTATION
SEDIMENTOLOGY
SEISMIC
SEISMIC REFLECTION
SHARK
SHELLFISH
SHIPWRECK
SHRIMP
SHRIMP FISHERY
SIDE SCAN SONAR
SILICATE
SIZE
SNAPPER
SNOOK
SOCIOECONOMIC
SOCIOLOGY
SOURCE
SPANISH MACKEREL
SPAWNING
SPAWNING AREA
SPECIES COMPOSITION
SPECIES DIFFERENTIAT
SPECIES LIST
SPINY LOBSTER
SPONGE
SPORT FISHERY
SPORT FISHING
STANDING CROP
STATISTICAL ANALYSIS
STATISTICS
STONE CRAB

STORM
STORM EVENT
STORM SURGE
STRATIGRAPHY
STRESS
STRESSED
STRUCTURE
SUBMARINE
SUBSTRATE
SULFATE
SURF ZONE
SURFACE CURRENT
SURVEY
SUSPENDED
SWFLA
SYSTEMATIC
TAGGING
TAR
TAXONOMY
TECTONIC
TEMPERATURE
TEMPERATURE ANOMALY
TIDAL
TIDE
TOPOGRAPHIC
TOPOGRAPHY
TOURISM
TOXICOLOGY
TRACE ELEMENT
TRACE METAL
TRANSPORT
TRANSPORTATION
TRAWL FISHERY
TROPICAL STORM
TUMOR
TURBIDITY
TURTLE
UPWELLING
UREA
VANADIUM
VERTEBRATA
VERTEBRATE
VITAMIN
WATER BUDGET
WATER COLUMN
WATER LEVEL
WATER MASS
WATER MOVEMENT
WATER POLLUTION
WATER QUALITY
WATER TEMPERATURE
WAVE
WAVE AMPLITUDE
WAVE ENERGY

WAVE HEIGHT
WAVE LENGTH
WAVE PERIOD
WAVE PRESSURE
WAVE SPEED
WEATHER
WEIGHT
WETLAND
WHALE
WHITE GRUNT
WILDLIFE
WIND
WIND DIRECTION
WIND DRIFT CURRENT
WIND FORCE
WIND SPEED
WIND STRESS
ZINC
ZOOGEOGRAPHY
ZOOLOGY
ZOOPLANKTON

If this information could be obtained, it was appended to the existing article, if one existed. If no article existed, this information, as well as the principal investigator (author), current date (date), brief description of data type and sampling location (citation or title), a more detailed description of the same (abstract), and key words, was to be entered into the Annotated Information System in a manner similar to an article.

Based on the information obtained about a specific data set, the Data and the Program Managers, were to decide the level of effort (no action, ROSCOP submission only, or data submission) to be expended in submitting these data or a record of these data to NODC. A ROSCOP form identifies the study, geographic location, all data types and their status and disposition, and whom to query for more information on the data. Consequently, anyone searching the NODC system will learn that the data exist and will be told whom to contact to obtain the data or further information.

If the data could be obtained in a computer-compatible form (i.e., tape, disk, or cards), the data were to be reformatted (i.e., put into appropriate form with required headers and descriptions) to NODC format. A Data Documentation Form (DDF) was supposed to accompany any data submission. The DDF provides NODC and other users with required ancillary information that increases the utility of the data submitted. The information contained in a DDF includes: originator identification (project title, names, addresses, sampling time and location, and disposition), scientific content (data field, units, sampling methods, analytical methods, and data processing techniques), data format (record types, file organization, and precise data format), record format, and instrument calibration (calibration dates, organization providing calibration services, and calibration schedule).

Prior to submitting any data (accompanied by a DDF), an NESDIS data submission agreement must be prepared. This agreement is a letter drafted by the ESE Data Manager specifying data types (e.g., Eulerian current data), NODC File Types (e.g., File Type 015--Eulerian Currents), a statement agreeing to submit the data in NODC format (as specified by file type), an agreement to submit a test tape, and an agreement to submit a DDF with all data submitted to NODC. This draft letter is sent to NODC where the letter is reviewed, additional conditions are appended, and the letter is signed by the NODC Director and returned to ESE for the Program Manager's signature. This letter establishes an agreement between ESE and NODC for all subsequent data submissions.

Any data not in computer-compatible form were not supposed to be digitized to make them computer compatible. The approach of submitting ROSCOP forms for all located data sets and submitting only data that were computer compatible was considered the most cost-effective approach. It ensured that future investigators would be aware of data available in the study area, but would keep the project costs within the limits of the budget.

7.0 SUMMARY

Numerous relevant publications and a few unpublished limited data sets were located during information collection. As previously discussed, this information was used extensively by the project's Principal Investigators in the synthesis of southwest Florida shelf ecosystems data. In this respect, the information collection task was very successful. Nevertheless, because resources were limited, priorities had to be established. These priorities were (in decreasing order) as follows: (1) assimilation of all available information, (2) synthesis of these data, (3) preparation of a report that provided a comprehensive physical and biological description of southwest Florida shelf ecosystems, (4) development of an annotated information systems, and (5)

NODC submissions. In reality Items 1, 2 and 3 all had the same high priority, therefore, these tasks were completed first and required the majority of the project's resources.

As previously discussed, an annotated bibliographic system was completed. Because of hardware and software limitations, the system is somewhat cumbersome to use. Nevertheless, this system does meet the requirements of MMS and is readily usable. Recently, another microcomputer program (TEAM-UP) has been identified that appears to be more powerful than PCINFO. Although it is beyond the scope of this project, MMS may wish to eventually consider converting their annotated bibliography to this system.

The submission of data to NODC was the least successful. This was due, in part, to the limited resources; however, the primary reason was the difficulty in locating the original data sets. Very quickly, information collection personnel found that even the task of locating the researchers was very time consuming. Frequently, particularly with older data sets, the researcher had moved, retired or passed away. Even if the original researcher could be located, rarely could he or she provide the information necessary to complete a ROSCOP form. In addition, the disposition of the data, its format, and whether the data had been submitted to NODC were unknown. If data were located, usually they existed on log sheets only.

Based on this experience, the project team does not recommend that valuable project resources be expended in such efforts. The benefit-to-cost ratio is low. Project resources are probably better used in locating information and then using this information in a comprehensive and detailed synthesis. With respect to NODC submissions, it is recommended that all future federally funded oceanographic work require NODC submission of any data collected.

8.0 REFERENCES CITED

- Alexander, J.E., T.T. White, K.E. Turgeon, and A.W. Blizzard. 1977. Baseline monitoring studies, Mississippi, Alabama, Florida outer continental shelf, 1975-1976. Final report to the U.S. Dept. of Interior, Bureau of Land Management, New Orleans OCS Office, Louisiana, Contract No. 08550-CT5-30.
- Barry A. Vittor and Associates, Inc. 1985. Tuscaloosa Trend regional data search and synthesis study. Final report submitted to Minerals Management Service, New Orleans, Louisiana. Contract No. 14-12-0001-30048. Two volumes.
- Boesch, D.F., and N.N. Rabalais (ed.). 1985. The long-term effects of offshore oil and gas development: an assessment and a research strategy. Prepared by the Louisiana Universities Marine Consortium for National Marine Pollution Program Office (NOAA).
- Continental Shelf Associates, Inc. 1987. Southwest Florida shelf regional biological communities survey. A final report submitted by Continental Shelf Associates, Inc. (Contract No. 14-12-0001-29036) to the Minerals Management Service, New Orleans, Louisiana. Three volumes.
- Danek, L.J., and G.S. Lewbel (Ed.). 1986. Southwest Florida shelf benthic communities study year 5 annual report. A final report by Environmental Science and Engineering, Inc., and LGL Ecological Research Associates, Inc., (Contract No. 14-12-0001-30211) submitted to the Minerals Management Service, New Orleans, Louisiana. Three volumes.
- Environmental Science and Engineering, Inc. and LGL Ecological Research Associates, Inc. 1985. Southwest Florida shelf benthic communities study year 4 annual report. A final report by Environmental Science and Engineering, Inc., and LGL Ecological Research Associates, Inc., (Contract No. 14-12-0001-30071) submitted to the Minerals Management Service, New Orleans, Louisiana. Three volumes.
- Florida Department of Administration. 1975. A selection compilation of unpublished graduate theses, titles, abstracts, and review from Florida universities relating to marine and coastal environmental studies. Report DSP-DO-27-76. 219p.
- Jones, J.I., R.E. Ring, M.O. Rinkel, and R.E. Smith, (ed.). 1973. A summary of knowledge of the eastern Gulf of Mexico. The State University System of Florida Institute of Oceanography, St. Petersburg, Florida.

- Mahadevan, S., J. Sprinkel, D. Heatwole, and D.H. Wooding. 1984. A review and annotated bibliography of benthic studies in the coastal and estuarine areas of Florida. Contr. Mote Marine Lab. V.2, No. 1. 576 p.
- Minerals Management Service. 1983. Final regional environmental impact statement: Gulf of Mexico. Minerals Management Service, Metairie, LA. Two volumes.
- Science Applications International, Corp. 1986. Gulf of Mexico physical oceanography program final report: Years 1 and 2. Prepared for Minerals Management Service, Metairie, LA (Contract No. 14-12-0001-29158). Two volumes.
- Science Applications International, Corp. 1987. Gulf of Mexico physical oceanography program final report: Year 4. Prepared for Minerals Management Service, Metairie, LA (Contract No. 14-12-0001-29158). Two volumes.
- The State University System of Florida Institute of Oceanography (SUSIO). 1974. Marine environmental implications of offshore drilling in the eastern Gulf of Mexico. Proceedings of a conference, Jan.-Feb. 1974, St. Petersburg, Florida. 455p.
- Woodward Clyde Consultants and Continental Shelf Associates. 1983. Southwest Florida shelf ecosystems study - year 1. Prepared for Minerals Management Service (Contract No. 14-12-0001-29142), Metairie, Louisiana. Four volumes.
- Woodward Clyde Consultants and Skidaway Institute of Oceanography. 1983. Southwest Florida shelf ecosystems study: year 2 modification, hydrography. Prepared for the Minerals Management Service, Metairie, Louisiana (Contract No. 14-12-0001-29144.1). Two volumes.
- Woodward Clyde Consultants and Continental Shelf Associates. 1984. Draft southwest Florida shelf ecosystems study - year 2. Prepared for the Minerals Management Service, Metairie, Louisiana (Contract No. 14-12-0001-29144). Seven volumes.
- Woodward Clyde Consultants and Continental Shelf Associates, Inc. 1982. Southwest Florida shelf ecosystems Study, marine habitat atlas. Report to Minerals Management Service. Two volumes.

9.0 ANNOTATED BIBLIOGRAPHY

This document represents a hard copy of the contents of the Annotated Information System contained on a microcomputer and associated hard disk system currently installed at the MMS Gulf of Mexico Regional Office located in New Orleans, Louisiana. The purpose of this Annotated Information System (Annotated Bibliography) is to provide MMS with a working tool for cataloging information on the oceanography of the Gulf of Mexico. This system and document are designed primarily for in-house MMS use and not for general distribution to the public. Nevertheless, a limited number of copies of this document are available for distribution through NTIS.

Because this hard copy of the Annotated Bibliography is an in-house document it does not follow, nor is it required to follow, the standard MMS format. Because of the shortcomings inherent in this microcomputer system (primarily the software and the FAMULUS format), text is truncated in all fields. This results in atypical and unhyphenated word splits. This was considered acceptable in light of the system's primarily in-house use.

06/08/1987

.....
ACC 866
TYPE
YEAR 1970
AUTH ABELE, L.G.;
TITL THE MARINE DECAPOD CRUSTACEA OF THE NORTHEASTERN GULF OF MEXICO.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL. 136 PP.

KEYW DECAPODA BENTHIC FAUNA SALINITY

ABST Between September, 1966 and August, 1968 a survey of decapod crustacea in the Destin-Panama City area was undertaken. Specimens were taken by various methods, returned to the laboratory, measured and preserved. A key for all specimens taken was constructed. Temperature and depth data were taken at all stations.

ANNO

06/08/1987

.....
ACC 2051
TYPE P
YEAR 1974
AUTH ABELE, L.G.;
TITL SPECIES DIVERSITY OF DECAPOD CRUSTACEANS IN MARINE HABITATS.

BIBL ECOLOGY 55:156-161.

KEYW DIVERSITY	DECAPOD	CRUSTACEAN
SALINITY	HABITAT	TEMPERATURE
TIDE		

ABST Species diversities of decapod crustaceans were compared to various abiotic parameters. The numbers of species were found to be little affected by temperature range, salinity range, or tidal exposure. The number of substrates was determined to be the most important factor in determining the number of species present, probably because each species can make differential use of each substrate. Latitude and longitude did not influence the numbers of decapod species within habitats. For ten marine habitats, the numbers of species of decapod crustaceans were as follows: temperate sandy beach (8); tropical sandy beach (7); tropical sand mud beach (16); temperate Spartina marsh (14); tropical Rhizophora mangroves (17,20); temperate man-made jet ties (34); tropical Pocillopora coral (55); and tropical rocky intertidal zones (67,78).

ANNO

.....

ACC 48

TYPE

YEAR 1982

AUTH ADAMS, C.E.;WELLS, J.T.;COLEMAN, J.M.;

TITL SEDIMENT TRANSPORT ON THE CENTRAL LOUISIANA CONTINENTAL SHELF: IMPLICATIONS
FOR THE DEVELOPING ATCHAFALAYA RIVER DELTA.

BIBL CONTRIB. MAR. SCI. 25:133-148.

KEYW CONTINENTAL SHELF
HYDROGRAPHY

CURRENTS
PHYSICAL PROCESS

GEOLOGY
SEDIMENT TRANSPORT

ABST Near-bottom current velocity measurements made at a continental shelf site off the central Louisiana coast over a 4 1/2-month period form the bases for an analysis of sediment transport in the benthic boundary layer. The winter flow field is represented by a tidally dominated regime superimposed on a slow wind-driven westward drift. Mean westerly flow frequently is interrupted by brief periods of intense eastward flow resulting from the passage of continental cyclonic storms. Cross-shelf flow is conspicuous throughout the data record. Bottom shear stress calculated from the quadratic relationship was high enough on eight separate occasions to resuspend the coarsest material (very fine sand) found at the study site. The presence of quantities of suspended sand in the water column during the periods of high bottom stress was indicated also by an analysis of the logarithmic layer near the bottom. Predominance of eastward displacements during the periods when bottom stress is high enough to cause resuspension of the sand-sized sediments together with small quantities of silts and clays, suggests that sand-sized material is moved selectively eastward and offshore, while the finer sediments are moved downcurrent with the mean flow. As Atchafalaya Bay continues to fill and Atchafalaya River sediment is carried out onto the continental shelf, much of the coarser material should remain in the immediate vicinity of the delta, front, and perhaps move to the southeast and thus tend to skew the coarser size components of the advancing delta in that direction.

ANNO

06/08/1987

.....
ACC 1099
TYPE
YEAR 1972
AUTH ADAMS, J.K.;
TITL A COMPARATIVE STUDY OF PHYTOPLANKTON PRIMARY PRODUCTIVITY AND RELATED PARAMETERS IN TWO NORTHWEST FLORIDA ESTUARINE BAYOUS.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 52 PP.

KEYW AMMONIA CHLOROPHYLL DISSOLVED OXYGEN
 NITRATE ORTHOPHOSPHATE

ABST Environmental parameters were monitored weekly at 3 stations in Mulatto Bayou and Catfish Basin, Pensacola Bay, Florida, in an effort to describe and compare the two systems with respect to their phytoplankton primary productivity. The study was conducted between July, 1971 and June, 1972.

ANNO

06/08/1987

.....
ACC 347
TYPE
YEAR 1980
AUTH AHRENHOLZ, D.W.;
TITL RECRUITMENT AND EXPLOITATION OF GULF MENHADEN, BREVOORTIA PATRONUS.

BIBL FISH. BULL. 79(2):325-335.

KEYW BIOLOGY	FISH TAG	RESOURCE
FISHERY	FISHERY STATISTICS	FISHING GEAR
PURSE SEINER		

ABST Gulf menhaden, *Brevoortia patronus*, range along the Gulf of Mexico Coast from Cape Sable, Florida, to Veracruz, Mexico, and are exploited by a purse seine fishery from Alabama to eastern Texas. Rates of exploitation, population movement, and recruitment into the fishery were estimated from returns of tagged juveniles and adults.

ANNO

06/08/1987

.....
ACC 2498
TYPE P
YEAR 1973
AUTH ALBERTSON, H.D.;
TITL A COMPARISON OF THE UPPER LETHAL TEMPERATURES OF ANIMALS OF FIFTY COMMON SP
ECIES FROM BISCAYNE BAY.

BIBL MASTER'S THESIS. MIAMI, FL. 78 P. UNIVERSITY OF MIAMI.

KEYW DADE TEMPERATURE INVERTEBRATE
SALINITY STRESS

ABST Temperature tolerance experiments were performed on 50 macroinvertebrate species from Biscayne Bay, Florida. The upper lethal temperatures of upper littoral organisms were higher than those of lower littoral organisms. At low salinity values the lethal temperature was reduced, though at extremely low salinities (less than 10 o/oo) the values were inconsistent. Optimal temperatures for growth were observed at 12-13 degrees C below the lethal temperatures of 3 species studied for long term temperature effects.

ANNO

06/08/1987

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ACC 193

TYPE

YEAR 1977

AUTH ALEXANDER, J.E.;WHITE, T.T.;TURGEON, K.W.;BLIZZARD, A.W.;

TITL BASELINE MONITORING STUDIES, MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINENT
AL SHELF, 1975-1976. VOLUME 1. EXECUTIVE SUMMARY.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/ST-78/30. 62 P.

KEYW FORAMINIFERA

BIOLOGY

HYDROGRAPHY

OCEANOGRAPHY

OIL

CONTINENTAL SHELF

PHYSICAL PROCESS

POLLUTION

ZOOPLANKTON

MAFLA

ABST Benchmark studies on the Eastern Gulf of Mexico Outer Continental Shelf were conducted seasonally to establish baseline information prior to extensive oil and gas development activity. No crude oil-like hydrocarbons were found in sediments, benthic organisms, zooplankton, suspended particulates nor dissolved phases on the Florida shelf. Moreover the abundance and diversity of organisms suggested that these organisms are living in an essentially pristine and natural ecological state, and show no evidence of stress owing to influx of pollutants.

ANNO

06/08/1987

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ACC 194

TYPE

YEAR 1977

AUTH ALEXANDER, J.E.;WHITE, T.T.;TURGEON, K.W.;BLIZZARD, A.W.;

TITL BASELINE MONITORING STUDIES, MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINENT
AL SHELF, 1975-1976. VOLUME 2. INTRODUCTION AND METHODS.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/ST-78/31. 119 P.

KEYW BIOLOGY

ECOLOGY

GEOLOGY

HYDROCARBON

OFFSHORE DRILLING

OIL

CONTINENTAL SHELF

POLLUTION

TAXONOMY

WATER QUALITY

MAFLA

ABST This volume contains the introduction, purpose and objectives of the study, description of the study area, and detailed statements of methodology employed for each parameter measured. The geological parameters included: suspended sediment mineralogy, x-radiography, clay mineralogy, and standard sediment size analysis. Chemical parameters included: selected trace elements and hydrocarbons in sediments; biota; and suspended particulate matter. Principal biological analyses included taxonomy of neuston, zooplankton, macroepifauna, macroinfauna, meiofauna, and microinfauna.

ANNO

06/08/1987

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ACC 195

TYPE

YEAR 1977

AUTH ALEXANDER, J.E.;WHITE, T.T.;TURGEON, K.W.;BLIZZARD, A.W.;

TITL BASELINE MONITORING STUDIES, MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINENT
AL SHELF, 1975-1976. VOLUME 3. RESULTS.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/ST-89/32. 484 P.

KEYW BIOLOGY

OFFSHORE DRILLING

SALINITY

MAFLA

ECOLOGY

CONTINENTAL SHELF

TAXONOMY

OCEANOGRAPHY

PHYSICAL PROCESS

TEMPERATURE

ABST Benchmark studies on the Eastern Gulf of Mexico Outer Continental Shelf were conducted seasonally to establish baseline information prior to extensive oil and gas development activity. No crude oil-like hydrocarbons were found in sediments, benthic organisms, zooplankton, suspended particulates nor dissolved phases on the Florida shelf. Moreover the abundance and diversity of organisms suggested that these organisms are living in an essentially pristine and natural ecological state, and show no evidence of stress owing to influx of pollutants. Some evidence of hydrocarbon anomalies were found in samples from the Mississippi-Alabama shelf probably due to drainage from the Mississippi River.

ANNO

06/08/1987

.....
ACC 196

TYPE

YEAR 1977

AUTH ALEXANDER, J.E.;WHITE, T.T.;TURGEON, K.W.;BLIZZARD, A.W.;

TITL BASELINE MONITORING STUDIES, MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINENT
AL SHELF, 1975-1976. VOLUME 4. DISCUSSION.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/ST-78/33. 222 P.

KEYW BENTHIC COMMUNITY

BIOASSAY

BIOLOGY

ECOLOGY

OFFSHORE DRILLING

CONTINENTAL SHELF

SEDIMENT

ZOOPLANKTON

MAFLA

ABST Benchmark studies on the Eastern Gulf of Mexico Outer Continental Shelf were conducted seasonally to establish baseline information prior to extensive oil and gas development activity. No crude oil-like hydrocarbons were found in sediments, benthic organisms, zooplankton, suspended particulates nor dissolved phases on the Florida shelf. Moreover the abundance and diversity of organisms suggested that these organisms are living in an essentially pristine and natural ecological state, and show no evidence of stress owing to influx of pollutants. Some evidence of hydrocarbon anomalies were found in samples from the Mississippi-Alabama shelf probably due to drainage from the Mississippi River. A study of tissue pathology revealed only parasites in otherwise normal benthic organisms. Major features affecting the study area were the Mississippi River, the Loop Current and hurricane Eloise. Trace metal (Cd, Cr, Cu, Fe, Ni, Pb and V) concentrations in Eastern Gulf samples were at levels expected for non-polluted areas.

ANNO

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ACC 197
TYPE
YEAR 1977
AUTH ALEXANDER, J.E.;WHITE, T.T.;TURGEON, K.W.;BLIZZARD, A.W.;
TITL BASELINE MONITORING STUDIES, MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINEN
TAL SHELF, 1975-1976. VOLUME 6. RIG MONITORING.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/ST-78/35.

KEYW BARIUM	BIOLOGY	ECOLOGY
HYDROCARBON	OFFSHORE DRILLING	OIL
CONTINENTAL SHELF	POLLUTION	SEDIMENT
WATER QUALITY	MAFLA	

ABST A study was conducted to provide a pre-, during-, and post-operational assessment of selected biological, chemical and geological aspects of the environment in the immediate vicinity of an exploratory drilling located in approximately 36 m of water off Mustang Island, Texas. Although a variety of parameters were measured at 25 stations around the platform, few environmental effects attributable to well-drilling operations were observed. These included: presence of obvious drill cuttings and concomitant changes in sediment texture, increased barium levels in sediments and added stress on the already depaupered foraminiferal populations.

ANNO

06/08/1987

.....
ACC 2052
TYPE P
YEAR 1978
AUTH ALEXANDER, J.E. (ED);
TITL FINAL REPORT ON THE BASELINE ENVIRONMENTAL SURVEY OF THE MAFLA LEASE AREAS.

BIBL SUBMITTED TO BUREAU OF LAND MANAGEMENT BY FLORIDA BOARD
OF REGENTS OFC. ON BEHALF OF STATE UNIVERSITY SYSTEM OF FLORIDA. 190 P.

KEYW GEOLOGY	BIOLOGY	CHEMICAL
PHYSICAL	OCEANOGRAPHY	BENTHIC
SEDIMENT	METAL	HYDROCARBON
NUTRIENT	CARBON	CHLOROPHYLL
INVERTEBRATE	BASELINE STUDY	MAFLA

ABST An extensive survey was conducted on the MAFLA shelf on the eastern Gulf of Mexico, from Mississippi to Clearwater, Florida. The sampling program was designed and conducted in the areas of geography, biology, and chemical and physical oceanography.

ANNO

06/08/1987

.....
ACC 66
TYPE
YEAR 1980
AUTH ALLEN, K.O.;
TITL IMPACTS OF NAVIGATIONAL DREDGING ON FISH AND WILDLIFE: A LITERATURE REVIEW.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS/OBS-80/07. 81 PP.
KEYW UNITED STATES BIOLOGY COASTAL ZONE
DREDGING FISH WATER QUALITY
WILDLIFE

ABST Literature about the impacts of navigational dredging on fish, other aquatic biota, and wildlife is reviewed. Also included are types of dredging equipment, characteristics of dredged material, evaluation of dredged material pollution potential, and habitat development and enhancement opportunities arising from dredged material disposal. The review contains a brief discussion of the state of knowledge and refers the reader to pertinent literature for additional information. The discussions about impacts and habitat development are divided into "Coastal Waters" (including disposal in estuarine, continental shelf, and deep ocean waters) and "Rivers." A limited discussion of the "Great Lakes" is included as an Appendix.

ANNO

06/08/1987

.....
ACC 1201
TYPE P
YEAR 1972
AUTH ALLEN, D.M.;
TITL REFERENCES AND SUBJECT INDEX CONCERNING THE CALICO SCALLOP, ARGOPECTEN GIBBUS.

BIBL NOAA INFORMAL REPT. NO. 1, NMFS SOUTHEAST FISH CTR. 31 PP.

KEYW CALICO SCALLOP BIBLIOGRAPHY BIOLOGY
MOLLUSC

ABST This bibliography lists approximately 200 references pertaining to the biology, fishing methods, process, and marketing of calico scallops, *Argopecten gibbus*. Citations are listed alphabetically by author and are cross-referenced by 22 subject categories.

ANNO

06/08/1987

.....
ACC 1202
TYPE P
YEAR 1972
AUTH ALLEN, D.M. & T. J. COSTELLO;
TITL THE CALICO SCALLOP, ARGOPECTEN GIBBUS.

BIBL NOAA TECH. REPT. NMFS SSRF- 656. 19 P.

KEYW BIOLOGY CALICO SCALLOP DISTRIBUTION
 SPAWNING LARVAL DEVELOPMENT

ABST This report summarizes information on the biology and fishery of the calico scallop, *Argopecten gibbus*. Shell morphology, color, and size range are given. The species is distributed throughout the western North Atlantic with the greatest known abundance off Cape Kennedy, Florida. Environmental factors affecting distribution and growth are discussed, and spawning activity and larval development are described. Although the calico scallop fishery has been slow in developing, it is predicted to increase harvest sizes with improvements in processing machinery.

ANNO

06/08/1987

.....

ACC 2163

TYPE P

YEAR 1966

AUTH ALLEN, D.M.; COSTELLO, T.V.;

TITL RELEASES AND RECOVERIES OF MARKED PINK SHRIMP *PENAEUS DUORARUM* BURKENROAD,
IN SOUTH FLORIDA WATERS, 1958-65.

BIBL U.S. DEPARTMENT OF THE INTERIOR, BUR. COMM. FISH, BIOL. LAB.,
CONTRIB. NO. 210, 79 P.

KEYW PINK SHRIMP TAGGING

ABST Pink shrimp were captured, stain-marked and released recapture in 17 experiments in the following areas: Biscayne Bay, Flamingo, Peterson Keys, Lower Matecumbe Key, Barnes Sound, Shark River, Hawk Channel, Bottle Key, Pine Island Sound, Tortugas grounds, Sanibel grounds and Indian Key. Data reported included location date of release and recapture of shrimp, number, size, and sex of shrimp, and the stains used.

ANNO

06/08/1987

.....
ACC 2378
TYPE P
YEAR 1980
AUTH ALLEN, D.M.; HUDSON, J.H.; COSTELLO, T.J.;
TITL POSTLARVAL SHRIMP (PENAEUS) IN THE FLORIDA KEYS: SPECIES, SIZE, AND SEASONAL ABUNDANCE.

BIBL BULL. MAR. SCI. 30(1):21-33.

KEYW MONROE	ABUNDANCE	SPAWNING
RECRUITMENT	SALINITY	WIND
CURRENTS	TEMPERATURE	PINK SHRIMP

ABST Postlarval shrimp (*Penaeus duorarum*) were collected from January 1966 to August 1968 at Whale Harbor Channel, Florida Keys. Postlarval abundance was greatest between April and September, but occurred year round. Maximum post larval abundance apparently was related to the seasonal increase in water temperature on offshore spawning grounds and to the annual sea level rise in Florida Bay. The area of origin of post larvae at Whale Harbor Channel and the location of their subsequent recruitment were identified.

ANNO

06/08/1987

.....
ACC 2554
TYPE P
YEAR 1979
AUTH ALLEN, D.M. ;
TITL BIOLOGICAL ASPECTS OF THE CALICO SCALLOP, ARGOPECTEN GIBBUS, DETERMINED
BY SPAT MONITORING.

BIBL NAUTILUS 93(4):107-119.

KEYW CALICO SCALLOP GROWTH TEMPERATURE

ABST Calico scallops (*Argopecten gibbus*) were collected using artificial spat traps at 5 stations (9-24 m depth) on the Cape Canaveral grounds from March 1970 to October 1971. Larvae were distributed throughout the water column, but were least abundant near the surface. Spat were present year round but were most abundant during spring (March-May). Settling sizes and growth rates are estimated. Numerous invertebrates were also collected in the traps, but calico scallops were generally dominant. Recommendations are made for future spat monitoring.

ANNO

06/08/1987

.....
ACC 2379

TYPE P

YEAR 1978

AUTH ALMASI, M.N.;

TITL ECOLOGY AND COLOR VARIATION OF BENTHIC FORAMINIFERA IN BARNES SOUND, NORTHEAST FLORIDA BAY.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL. 144 P.

KEYW MONROE
BENTHIC

SEDIMENT
FORAMINIFERA

DISTRIBUTION

ABST Sediment and hydrological samples were taken from 30 stations in Barnes Sound, Northeast Florida Bay to study the taxonomy and distribution of benthic foraminifera and the causes of test color differences. Forty-two species of foraminifera were represented in the sediment samples. The existence of a reducing condition in portions of Barnes Sound in the presence of sulphate reducing bacteria influences test color, and the color variation reflects the depositional history of the sediment. Therefore, the condition of the foraminiferal tests can be used to determine the rate of sediment reworking and the depositional environment.

ANNO

06/08/1987

.....
ACC 2219
TYPE P
YEAR 1971
AUTH ALVIS, C.A.;
TITL TROPHIC RELATIONSHIPS BETWEEN SIGNIFICANTLY ASSOCIATED SPECIES OF MACROBENTHOS IN THE SHOAL GRASS HABITAT.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW SEAGRASS FOOD HABIT MACROFAUNA
 BENTHIC

ABST Nineteen hypothetical trophic relationships between significant associated species of macrobenthos in the shoal grass habitat in St. Georges South, Florida, were reasonably justified by gut analyses. Gut analyses on 31 species revealed 64 plant, animal or miscellaneous gut items, most of which were suspected of being components or inhabitants of detritus, the most prevalent gut item. Tests of significance (at 0.05 level) of the difference in gut item proportions between species showed that all species were detritus feeders with a tendency toward either a herbivorous or a carnivorous feeding habitat.

ANNO

06/08/1987

.....
ACC 2185
TYPE P
YEAR 1970
AUTH ANDERSON, W.W. ;
TITL CONTRIBUTIONS TO THE LIFE HISTORIES OF SEVERAL PENAEID SHRIMPS (PENAEIDAE)
ALONG THE SOUTH ATLANTIC COAST OF THE UNITED STATES.

BIBL U.S. FISH AND WILDLIFE SERVICE. SPEC. SCI. REPT., FISH NO. 605. 24 P.

KEYW LIFE HISTORY	FISHERY	BROWN SHRIMP
PINK SHRIMP	DISTRIBUTION	SPAWNING

ABST Trends in the shrimp fishery of the south Atlantic coast of the United States were examined as a whole, by states, and by species for the period 1958 to 1967. A steady decline in total shrimp landings was the major finding. Studies on the white shrimp (*Penaeus setiferus*) in 1931-1935 also yielded data on the brown shrimp (*P. aztecus*), the sea bob (*Xiphopenus kroyeri*) and *Trachypeneus constrictus*. Data were collected on the pink shrimp (*P. duorarum*) near Cape Kennedy, Florida in 1965-1967. Information is presented on size, distribution; ovary development; sex ratios, and spawning seasons of several shrimp species.

ANNO

06/08/1987

.....
ACC 4290

TYPE P

YEAR 1981

AUTH ANDERSON, J.B.;WHEELER, R.B.;SCHWARZER, R.R.;

TITL SEDIMENTOLOGY AND GEOCHEMISTRY OF RECENT SEDIMENTS (ENVIRONMENTAL EFFECTS OF OFFSHORE OIL PRODUCTION: THE BUCCANEER GAS AND OIL FIELD STUDY).

BIBL MAR. SCI. 14:59-67.

KEYW GEOCHEMISTRY
POLLUTION

SEDIMENT

OIL

ABST

ANNO

06/08/1987

.....
ACC 2053
TYPE P
YEAR 1970
AUTH ADDRESS, N.E.;
TITL DISTRIBUTION OF FORAMINIFERA IN THE SOUTHEASTERN GULF OF MEXICO.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW DISTRIBUTION FORAMINIFERA SEDIMENT

ABST An investigation was made of the frequency distribution of Foraminifera in the southeastern region of the Gulf of Mexico. From the 50 bottom sediment samples collected, 4 depth zones, each with its own foraminiferan species were described. The majority of samples were composed of species found in the Gulf of Mexico. Inconsistencies existed in the effect of bottom sediments on distribution and abundances. Above 90 m faunal trends were correlated only with depth changes.

ANNO

06/08/1987

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ACC 2499

TYPE P

YEAR 1981

AUTH ANDREE, S.W.;

TITL LOCOMOTORY ACTIVITY PATTERNS AND FOOD ITEMS OF BENTHIC POSTLARVAL SPINY LOBSTERS, PANULIRUS ARGUS.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL. 50 P.

KEYW DADE

SPINY LOBSTER

SEASON

SUBSTRATE

BEHAVIOR

ABST Panulirus argus (spiny lobsters) were studied from September 1980 to June 1981 in Biscayne Bay to determine postlarval locomotory activity, foraging, and diet. Activity started just after sunset, was the highest by midnight and ended before sunrise. The diet was diverse, suggesting that postlarvae are opportunistic, generalist feeders. There was little foraging duration variation seasonally.

ANNO

06/08/1987

.....
ACC 268

TYPE

YEAR 1974

AUTH ANTOINE, J.W.; MARTIN, R.G.; PYLE, T.E.; BRYANT, W.R.;

TITL CONTINENTAL MARGINS OF THE GULF OF MEXICO.

IN: BURKE, C.A. AND DRAKE, C.L. EDS. THE GEOLOGY OF CONTINENTAL MARGINS.

BIBL SPRINGER-VERLAG, NEW YORK, NY. P. 683-693.

KEYW CONTINENTAL MARGIN CONTINENTAL SHELF CONTINENTAL SHELF
GEOLOGIC HISTORY GEOLOGY SEDIMENTOLOGY
STRUCTURE TECTONIC

ABST The Gulf of Mexico is a small ocean basin whose continental margins are structurally complex and in some cases rather unique. The origin of the Gulf Basin and the subsequent construction of the continental margins are somewhat in contention. The prominent theories contain one of four basic ideas that the Gulf represents: (1) a foundered and oceanized continental mass; (2) a downwarp related to a thermally controlled phase change in the crust and mantle; (3) a gigantic tensioned rift formed in relation to Mesozoic opening of the Atlantic Ocean; and (4) a paleozoic or older ocean basin. The structure of the continental margins of the Gulf of Mexico are the results of tectonic activity related to salt movement, reef growth, current activity, and the massive uppouring of sediments along its northern boundaries. The continental margins of the Gulf are divided into two distinct physiographic and sedimentological provinces, separated physically by two submarine canyons. The DeSoto Canyon in the northeast and the Campeche Canyon in the southwest. These two canyons dividing line between the limestone platforms of the West Florida and Yucatan platforms and the clastic embayments of the northern and western Gulf of Mexico.

ANNO

.....
ACC 543
TYPE
YEAR 1971
AUTH ANTOINE, J.W.;
TITL STRUCTURE OF THE GULF OF MEXICO.

IN: REZAK, R. AND HENRY, V.L. EDS. CONTRIBUTIONS ON THE GEOGRAPHICAL
OCEANOGRAPHY OF THE GULF OF MEXICO.

BIBL TEXAM A&M UNIVERSITY, OCEANOGRAPHIC STUDIES, VOLUME 3:1-34.

KEYW CONTINENTAL SHELF DIAPIR GEOLOGIC HISTORY
 GEOLOGY PHYSIOGRAPHY SEISMIC REFLECTION
 STRUCTURE

ABST Shallow seismic reflection profiles demonstrate the unique geologic characteristics of the seven provinces of the Gulf of Mexico. These reflection data, when considered along with other information that has been collected from coring, dredging, magnetic and gravity investigations, make it possible to theorize on the origin of these provinces and their relationship to the total Gulf of Mexico evolution. A short summary of the nature of the individual provinces follows: 1) The Gulf Basin contains a thick sedimentary sequence and is underlain by oceanic crust. 2) The shelf and slope area of the northeastern Gulf is a carbonate bank which has been subsiding at least since the Cretaceous time. The Mesozoic salt deposits of the northern Gulf thin toward the east in this province. 3) The South Florida Platform is also a carbonate bank which represents an earlier basin centered on the Florida continental shelf. An extensive reef represents the western barrier of the basin during the Lower Cretaceous. 4) The Yucatan Platform and Campeche Bank may be an extension of the carbonate platform of south Florida. Seismic velocities and age correlations are almost identical. 5) The Isthmian Embayment, which is related to Late Paleozoic orogenies, is similar to the northern Gulf shelf and slope of Texas and Louisiana in terms of the great Tertiary sedimentary thicknesses and the dominance of vertical salt movement in the tectonics of the area. 6) The eastern Mexican shelf and slope is characterized by folds parallel to the present shoreline. These probably represent salt features. 7) The major feature of the northwestern Gulf is the Gulf Coast

ANNO

06/08/1987

.....
ACC 750
TYPE
YEAR 1958
AUTH ARNOLD, E.L.;
TITL GULF OF MEXICO PLANKTON INVESTIGATIONS, L951-53.

BIBL U.S. FISH AND WILDLIFE SERVICE, SPEC. SCI. REP. FISH. NO. 269.

KEYW GULF OF MEXICO	BIOLOGY	FISH EGGS
FISH LARVAE	PLANKTON	TAXONOMY
ZOOPLANKTON		

ABST This report presents the results of a group of cruises into the Gulf of Mexico during 1951-53. The cruises were taken to characterize the plankton of the Gulf with special emphasis on fish larvae and eggs. A number of transects were taken in various areas of the Gulf along the Continental Shelf and offshore. Two types of sampling gear were used and the efficiencies of each are discussed.

ANNO

06/08/1987

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ACC 708
TYPE
YEAR 1958
AUTH ARNOLD, E.L.;
TITL GULF OF MEXICO PLANKTON INVESTIGATIONS, 1951-1953.

BIBL U.S. FISH AND WILDLIFE SERVICE, SPEC. SCI. REP. FISH. NO. 269.

KEYW BIOLOGY	FISH EGG	FISH LARVAE
PLANKTON	ZOOPLANKTON	TAXONOMY

ABST This report presents the results of a group of cruises into the Gulf of Mexico during 1951-53. The cruises were taken to characterize the plankton of the Gulf with special emphasis on fish larvae and eggs. A number of transects were taken in various areas of the Gulf along the Continental Shelf and offshore. Two types of sampling gear were used and the efficiencies of each are discussed.

ANNO

06/08/1987

.....
ACC 847
TYPE
YEAR 1974
AUTH ARMSTRONG, D.W. ;
TITL SOME DYNAMICS OF CARBON, NITROGEN AND PHOSPHORUS IN THE MARINE SHELF ENVIRO
NMENT OF THE MISSISSIPPI FAN.

BIBL MASTER'S THESIS. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 79 PP.

KEYW	ALKALINITY	AMMONIA	CARBON
	CHLORINE COMPOUNDS	INORGANIC COMPOUND	NITROGEN
	PHOSPHATE	PHOSPHORUS	SULFATE

ABST Twenty-five gravity cores were collected from the Mississippi Fan and Mississippi River between July, 1973 and June, 1974 during cruises 73-1-2 of the R/V Longhorn and 74-G-9 of the R/V gyre. Samples were analyzed for organic carbon, total nitrogen and organic and inorganic phosphorus. Interstitial water was analyzed for chloride, ammonia, phosphate, sulfate and alkalinity

ANNO

06/08/1987

.....
ACC 1078
TYPE
YEAR 1980
AUTH ARNTZ, W.E.;
TITL PREDATION BY DEMERSAL FISH AND ITS IMPACT ON THE DYNAMICS OF MACROBENTHOS.

BIBL P. 121-149. IN: TENORE, K.R. AND COULL, B.C. (EDS.). MARINE BENTHIC DYNAMICS. UNIVERSITY OF SOUTH CAROLINA PRESS, COLUMBIA, SC.

KEYW BENTHIC COMMUNITY BENTHIC FAUNA BIOLOGY
COMMUNITY STRUCTURE ECOLOGY

ABST Since 1968, investigations have been carried out in the western Baltic on inter-relationships of the dynamics of macrobenthos and demersal fish. These studies have involved: 1) investigations of over 5,000 stomach gut analyses to quantify the food (including seasonal changes) of cod, whiting, dab, plaice, flounder and some less important fish species; 2) survey of infaunal macrobenthos over eight years (1968-1971 and 1975-1978); and 3) a three-year experimental study on dynamics and production of macrobenthos at the "Benthosgarten" station. This paper also includes fish data published annually by the International Council for the Exploration of the Sea and from other studies carried out in Kiel Bay. The interaction of macrobenthos and demersal fish is discussed, particularly regarding the effects of selective predation. Differences in predation intensity from year to year, resulting in reduced population levels of macrobenthos, were observed, but the long-term dynamics of the more important benthic food species in the western Baltic were seemingly not influenced by the year-class strength of demersal fish. Likewise, the year-class strength of benthos in different years did not affect the size and production of the demersal fish stocks in the area. A number of possible reasons for this apparent lack of correlation are discussed.

ANNO

06/08/1987

.....
ACC 348
TYPE
YEAR 1973
AUTH ARTHUR D. LITTLE, INC. ;
TITL GULF COAST DEEP WATER PORT FACILITIES STUDY, ENVIRONMENTAL ASSESSMENT.

BIBL U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT, VICKSBURG, MS. 87 PP.

KEYW BIOLOGY OCEANOGRAPHY SOCIOECONOMIC

ABST

ANNO

06/08/1987

.....
ACC 2054
TYPE P
YEAR 1981
AUTH ATLAS, E.;
TITL SYNTHETIC ORGANICS IN THE GULF OF MEXICO - A REVIEW.

IN: PROC. OF A SYMP. ON ENVIRON. RESEARCH NEEDS IN THE GULF OF MEXICO,
KEY BISCAYNE, FL. 30 SEPT.-5 OCT., 1979. D.K. ATWOOD (CONVENER).

BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB., MIAMI, FL.
VOL. IIC: P. 131-165.

KEYW HYDROCARBON BIOTA SEDIMENT
WATER COLUMN

ABST This summary paper reviews the state of knowledge on two classes of compounds (halogenated hydrocarbons and the phthalate ester plasticizers) in the Gulf of Mexico. Concentrations of these trace organics in the Gulf of Mexico are summarized for the biota, water, and sediments. Analytical methodology and inputs, removal mechanisms, and transformation of the synthetic organics in the Gulf of Mexico are also reviewed. Gaps in existing knowledge are identified and suggestions for priority areas of research are made.

ANNO

06/08/1987

.....
ACC 10
TYPE
YEAR 1981
AUTH ATWOOD, D.K.;
TITL PROCEEDINGS OF A SYMPOSIUM ON ENVIRONMENTAL RESEARCH NEEDS IN THE GULF OF MEXICO (GOMEX), SEPTEMBER 30 - OCTOBER 5, 1979, KEY BISCAYNE, FL.

BIBL NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA/ERL), ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LABORATORIES, MIAMI, FL. 4 VOLS.

KEYW BIOLOGY	CHEMISTRY	ECOLOGY
SOCIOECONOMIC	FISHERY	GEOLOGY
METEOROLOGY	OCEANOGRAPHY	WETLAND

ABST Proceedings include results and discussions recorded at a meeting of a group of U.S. and Mexican economists, marine scientists, and environmental managers regarding needs for marine-related environmental research in the Gulf of Mexico during the next decade. The workshop was divided into three panel groups entitled: natural setting, anthropogenic input and impacts, and environmental management and public concern. Reports from each of these panels are included in these proceedings as are the panel participants.

ANNO

06/08/1987

.....
ACC 1203
TYPE P
YEAR 1970
AUTH AVENT, R.M., JR.
TITL THE EFFECT OF HYDROSTATIC PRESSURE ON SELECTED INTERTIDAL AND SHALLOW WATER
ANIMALS.

BIBL FLA. STATE UNIV. M.S. THESIS.

KEYW

ABST The behavioral changes of 143 intertidal and shallow marine invertebrates (representing 38 species and 7 phyla) subjected to increases in hydrostatic pressure (up to 3200 psi) were observed. The first response, and the pressure at which it occurred, were recorded to determine the relative sensitivities of each species. The taxonomic position of the organism and the biotope from which it was collected were related to the pressure sensitivities of each species.

ANNO

06/08/1987

.....
ACC 2186
TYPE P
YEAR 1977
AUTH AVENT, R.M.;KING, M.E.;GORE, R.H.;
TITL TOPOGRAPHIC AND FAUNAL STUDIES OF SHELF-EDGE PROMINENCES OFF THE CENTRAL EASTERN FLORIDA COAST.

BIBL INT. REVUE GES. HYDROBIOL. 62(2):185-208.

KEYW TOPOGRAPHIC INVERTEBRATE FISH
 POPULATION CORAL

ABST Eighty topographic profiles made off the Central Atlantic coast of Florida from November 1973 to September 1974 revealed the presence of a band of pinnacles, benches, mounds, and troughs along the shelf edge from Fort Pierce to Cape Canaveral and a massive mound off St. Lucie Inlet. Dredgings and submersible observations at 2 areas of extreme vertical relief demonstrated the presence of diverse invertebrate and fish populations associated with exposed limestone bedrock and the hard coral, *Oculina varicosa*.

ANNO

06/08/1987

.....
ACC 4178

TYPE P

YEAR 1985

AUTH AYERS, R.C.; SAUER, T.C.; ANDERSON, P.W.;

TITL THE GENERIC MUD CONCEPT FOR NPDES PERMITTING OF OFFSHORE DRILLING DISCHARGE
S.

BIBL J. PETROL. TECH. 37(3):475-480.

KEYW MUD
OFFSHORE

DRILLING

OIL AND GAS

ABST

ANNO

06/08/1987

.....
ACC 4201

TYPE P

YEAR 1982

AUTH AYERS, R.C., JR.; MEEK, R.P.; SAUER, T.C., JR.; STUEBNER, D.O.;

TITL AN ENVIRONMENTAL STUDY TO ASSES THE EFFECT OF DRILLING FLUIDS ON WATER QUALITY PARAMETERS DURING HIGH-RATE HIGH-VOLUME DISCHARGES TO THE OCEAN.

BIBL J. PET. TECHNOL. 34(1):165-173.

KEYW DRILLING MUD
POLLUTION

DRILLING FLUID
WATER QUALITY

OFFSHORE DRILLING

ABST

ANNO

06/08/1987

.....
ACC 2381

TYPE P

YEAR 1976

AUTH BACH, C.;HAZLETT, B.;RITTSCHOF, D.;

TITL EFFECTS OF INTERSPECIFIC COMPETITION ON FITNESS OF THE HERMIT CRAB CLIBANARIUS TRICOLOR.

BIBL ECOLOGY 57(3):579-586.

KEYW MONROE
INVERTEBRATE

CRAB

STRESS

ABST The effects of interspecific competition on the fitness of *Clibanarius tricolor* was studied. *C. tricolor* was found to overlap strongly in shell utilization with other common species of intertidal hermit crabs found in the Florida Keys. Laboratory observations indicated that *C. tricolor* can dominate *C. antillensis* in shell fights, while *Calcinus tibicen* can dominate *C. tricolor*. In micro areas of sympatry with *C. antillensis*, *C. tricolor*'s shell fit was found to be better. Egg production of *C. tricolor* was the same in areas with or without *C. antillensis*. Sympatry with *Calcinus tibicen* resulted in a poorer shell fit, a smaller mean size of crab, and a disruption of the relationship between clutch size and crab size. The study suggests that the ecological separation which characterizes these species over most of their ranges was an evolutionary response, in part, to the effects of interspecific shell competition.

ANNO

06/08/1987

.....
ACC 2500
TYPE P
YEAR 1970
AUTH BADER, R.G.; ROESSLER, M.A.; THORHAUG, A.;
TITL THERMAL POLLUTION OF A TROPICAL MARINE ESTUARY.

BIBL IN: FAO TECH. CONF. ON MAR. POLL. & ITS EFFECTS ON LIVING RESOURCES & FISHERIES. ROME, 1970. P. 425-428.

KEYW DADE	POLLUTION	MORTALITY
MACROALGAE	SEAGRASS	FISH
INVERTEBRATE	SEDIMENT	TEMPERATURE
SALINITY	DO	METAL

ABST The results of field and laboratory studies on thermal pollution of the Biscayne Bay tropical marine estuary demonstrated that sustained temperatures above 33 degrees C can cause excessive mortalities in some macroalgae and seagrasses. This, in turn, could eliminate the major food source and shelter for a great number of herbivores and detritus feeders, including the juvenile stages of some commercial species. In addition to immediate losses of fish and invertebrate species, the lack of sufficient bottom vegetation could result in increased erosion of the sediment. This process could have a detrimental effect on productivity, which would further contribute to the deterioration of estuarine areas. The upper thermal limits of selected species of estuarine flora and fauna are discussed.

ANNO

.....
ACC 488

TYPE

YEAR 1978

AUTH BAGUR, J.D.;

TITL BARRIER ISLANDS OF THE ATLANTIC AND GULF COASTS OF THE UNITED STATES: AN AN
NOTATED BIBLIOGRAPHY.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS/OBS-77/56. 215 P.

KEYW BARRIER ISLAND BIBLIOGRAPHY ECOSYSTEM
 FISHERY PHYSICAL PROPERTY RESOURCE
 WILDLIFE

ABST

ANNO

06/08/1987

.....
ACC 801
TYPE
YEAR 1982
AUTH BAIN, M.B.;BAIN, J.L.;
TITL HABITAT SUITABILITY INDEX MODELS, COASTAL STOCKS OF STRIPED BASS.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWD-OBS-10.1. 29 P.

KEYW	BIOLOGY	ECOLOGY	FISH
	FISHERY	RESOURCE	HABITAT
	LIFE HISTORY	MODEL	MANAGEMENT

ABST

ANNO

06/08/1987

.....
ACC 898
TYPE
YEAR 1975
AUTH BAKER, R.O.;
TITL STUDIES OF MYXOSPORIDA (PROTOZOA) IN THE MULLET MUGIL CEPHALUS.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 74 PP.

KEYW PARASITE PELAGIC FISH MULLET
 PATHOLOGY

ABST Myxosporida (protozoa) parasites of Mugil cephalus, mullet, were examined on 793 fish collected in Mulatto Bayou and Escambia Bay, Florida between January, 1970 and June, 1971. Parasites were examined on eyes, scales, gills and internal organs.

ANNO

06/08/1987

.....
ACC 550
TYPE
YEAR 1970
AUTH BALLARD, R.D.; UCHUPI, E.;
TITL MORPHOLOGY AND QUATERNARY HISTORY OF THE CONTINENTAL SHELF OF THE GULF COAST OF THE UNITED STATES.

BIBL BULL. MAR. SCI. 20(3):547-559.

KEYW PLEISTOCENE	QUARTERNARY	COASTAL WATER
CONTINENTAL SHELF	GEOLOGIC HISTORY	GEOLOGY
PHYSIOGRAPHY	SEDIMENTATION	

ABST Sea-level fluctuations of the Quaternary have greatly influenced the surface morphology of the continental shelf off the Gulf Coast of the U.S.
Two prominent shorelines, at 60 and 160 meter depths, and other features found on the gulf shelf can be related to the relatively recent events of the Quaternary, particularly those of the Holocene transgression. Landward of the 40 meter contour, the slow rise of the sea surface and modern sedimentation have produced a complex mixture of topographic expressions. Diapiric structures, which are abundant from De Soto Canyon westward, appear to be of secondary importance in contributing to the shelf's surface relief.

ANNO

06/08/1987

.....
ACC 2543

TYPE P

YEAR 1979

AUTH BANE, L.;

TITL A SEASONAL STUDY OF SESSILE MARINE FOULING ORGANISMS IN NORTHERN LAKE WORTH
, FLORIDA.

BIBL MASTER'S THESIS. FLORIDA ATLANTIC UNIVERSITY, BOCA RATON, FL. 68 P.

KEYW SEASONA
DEVELOPMENT
TEMPERATURE

FOULING
COMMUNITY
DISSOLVED OXYGEN

RECRUITMENT
SALINITY
GROWTH

ABST Seasonal recruitment patterns and development of a fouling community on gel coat-covered fiberglass plates were investigated at 3 sites in northern Lake Worth, Florida, from September 1976 to September 1977. Species abundance was higher at 2 stations which had relatively stable levels of salinity, temperature, and dissolved oxygen than at the third station, which was subject to more variable abiotic conditions. All stations exhibited maximum settlement and growth in the spring and early summer. Three species were found to settle only on plates that had been previously colonized.

ANNO

06/08/1987

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ACC 2055

TYPE P

YEAR 1981

AUTH BARNARD, R.W. & FROELICH, P.N., JR.;

TITL NUTRIENT GEOCHEMISTRY OF THE GULF OF MEXICO. IN: PROC. OF A SYMP. ON ENVIR
. RESEARCH NEEDS IN THE GULF OF MEXICO, KEY BISCAYNE, FLA., 30 SEPT.-5 OCT.
1979. D. K. ATWOOD (CONVENER).

BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LABORATORIES, MIAMI, FL
A. VOL IIA. P. 127-146.

KEYW GEOCHEMISTRY WATER MASS SEDIMENT
NUTRIENT

ABST This summary paper reviews the state of knowledge on the elements known to
be involved in biogeochemical pathways. Information on the water masses and
sediments of the Gulf of Mexico as they relate to these elements are reviewed.
The sparsity of information on sedimentary and interstitial water nutrient
geochemistry is noted and suggestions for future research are made.

ANNO

06/08/1987

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ACC 4000

TYPE P

YEAR 1972

AUTH BARLOGA, F.R.; SMITH, R.E., EDS.;

TITL CHARACTERIZATION AND DOCUMENTATION REPORT ON DISSIMILAR HYDROBIOLOGICAL ZONES OF THE EASTERN GULF OF MEXICO.

BIBL THE STATE UNIVERSITY OF FLORIDA INSTITUTE OF OCEANOGRAPHY, ST. PETERSBURG, FL.

KEYW BIOLOGY

GEOLOGY

CHEMISTRY

PHYSICAL

OCEANOGRAPHY

BASELINE STUDY

CONTINENTAL SHELF

ABST As part of an environmental assessment of the Gulf of Mexico conducted in connection with proposed deep-water port development, information concerning the oceanography of the eastern Gulf of Mexico was compiled by researchers from the State University System of Florida. Topics included physical and chemical oceanography, geology, marine biology, and tourism.

ANNO

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ACC 4160
 TYPE P
 YEAR 1985
 AUTH BARRY, A.; VITTOR & ASSOCIATES, INC.;
 TITL TUSCALOOSA TREND REGIONAL DATA SEARCH AND SYNTHESIS STUDY (VOL. I--SYNTHESIS REPORT AND VOL. II--SUPPLEMENTAL REPORTS.

BIBL FINAL REPORT SUBMITTED TO MINERALS MANAGEMENT SERVICE, METAIRIE, LA. CONTRACT #14-12-0001-30048. 877 PP.

KEYW BIBLIOGRAPHY	PHYSICAL	CHEMICAL
BIOLOGICAL	OCEANOGRAPHY	CURRENT
CIRCULATION	MODEL	SOCIOECONOMIC
FISH	INVERTEBRATE	MACROALGAE
PHYTOPLANKTON	ZOOPLANKTON	

ABST Information on the natural resources of the Tuscaloosa Trend OCS (southeastern Louisiana-Mississippi, and Alabama), from coastal marshes to a depth of 200 m, have been collected, annotated, and synthesized. Over 1200 published and unpublished data sources were reviewed and citations computerized in the NEDRES format to provide MMS a means for retrieving, updating, and expanding the data base. A conceptual ecosystem model of the Tuscaloosa Trend shelf has been developed that represents the OCS region as an integrated system of physical and biogeochemical components, stressing functional relationships and interactions with adjoining ecosystems. Synthesis report chapters characterize the ecosystem model, physiography and geology, physical and chemical oceanography, ecological resources, and socioeconomic features of the region. Water mass circulation in both coastal and shelf waters is strongly affected by open Gulf circulation (e.g., Loop Current), diurnal tides, sustained winds, and freshwater discharge from major river systems (e.g., Mississippi and Mobile Rivers). Net longshore littoral drift is generally to the west along the Mississippi-Alabama barrier islands and to the north along Chandeleur-Breton Islands as determined from island migration patterns. Transport of nutrients to the inner shelf occurs during periods of high river discharges, while outer shelf areas are provided with nutrients primarily during intrusions of oceanic waters. Pollutants are generally restricted to areas of localized inputs (i.e., discharges from coastal industrial and municipal centers). Demersal fishes and benthic community patterns

ANNO

06/08/1987

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ACC 2382

TYPE P

YEAR 1973

AUTH BASAN, P.B.;

TITL ASPECTS OF SEDIMENTATION AND DEVELOPMENT OF A CARBONATE BANK IN THE BARRACUDA KEYS, SOUTH FLORIDA.

BIBL J. SEDIMENT. PETROL. 43(1):42-53.

KEYW MONROE
SEDIMENT

CARBONATE

ALGAE

ABST Factors influencing the accumulation of carbonate sediments into a bank were studied. Factors influencing growth and present configuration. The development of this bank was summarized as follows: preferential accumulation of fine sediment in sink holes, forming coalescing silty banks; contemporaneous colonization of these banks by calcareous algae and marine grasses; entrapment and accumulation of coarse sediment by these marine plants forming a single contiguous sand bank; and continued growth by accretion of sediment over avalanche slopes. It was determined that the bank is probably extending itself into the adjoining lagoon by a process of differential growth. This process is dependent upon stabilization of one part of the bank, while growth continues in another.

ANNO

06/08/1987

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ACC 436

TYPE

YEAR 1975

AUTH BASS, R.J.; AVAULT, A.W.;

TITL FOOD HABITS, LENGTH-WEIGHT RELATIONSHIP, CONDITION FACTOR, AND GROWTH
OF JUVENILE RED DRUM SCIAENOPS OCELLATUS IN LOUISIANA.

BIBL TRANS. AM. FISH. SOC. 104(1):35-45.

KEYW BIOLOGY

FEEDING HABITS

LENGTH

COASTAL WATER

FISH

WEIGHT

ECOLOGY

GROWTH

ABST

ANNO

06/08/1987

.....
ACC 2383
TYPE P
YEAR 1970
AUTH BAUER, J.C.;
TITL CONTRIBUTIONS TO THE BIOLOGY OF THE SEA URCHIN DIADEMA ANTILLARUM.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL. 62 P.

KEYW MONROE	BIOLOGY	GROWTH
SPAWNING	TEMPERATURE	TIDE
LIGHT	ECHINODERMATA	

ABST *Diadema antillarum* was studied in 3 habitats off Southern Florida between March 1968 and February 1969. Test growth rates were investigated. Comparative studies showed that tropical species grew fastest, with the exception of heart urchins. Aggregation increased during the spawning period and was influenced by tidal fluctuations. Gametogenesis and spawning were associated with dropping temperatures. A synchronized spawning pattern from Key West to Bermuda is suggested.

ANNO

06/08/1987

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ACC 2384
TYPE P
YEAR 1976
AUTH BAUER, J.C.;
TITL GROWTH, AGGREGATION AND MATURATION IN THE ECHINOID, DIADEMA ANTILLARUM.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW MONROE	GROWTH	REPRODUCTION
TEMPERATURE	SPAWNING	ECHINODERMATA

ABST A study of growth, aggregation, and reproduction of *Diadema antillarum* was conducted at 3 sites, representing 3 habitats located at Boca Raton, Indian Key, and Key West, Florida. The growth rate of young *D. antillarum* at Boca Raton was found to be 5 times greater than that of adults over the same 6 month period in 1968. Gametogenesis at Indian Key was initiated in the fall of 1968 with decreasing water temperature. Major spawning occurred during a period of low temperature in November 1968 at both Indian Key and Key West. Spawning time was correlated with lunar phases. Aggregation of *D. antillarum* was influenced by reproductive state and tidal fluctuation.

ANNO

06/08/1987

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ACC 4316

TYPE P

YEAR 1980

AUTH BAUER, J.C.;

TITL OBSERVATIONS ON GEOGRAPHICAL VARIATIONS IN POPULATION DENSITY OF THE
ECHINOID DIADEMA ANTILLARUM WITHIN THE WESTERN NORTH ATLANTIC.

BIBL BULL. MAR. SCI. 39\0(2):509-515.

KEYW ECHINODERMATA
TEMPERATURE

HABITAT
SPAWNING

GROWTH
DISTRIBUTION

ABST Animal density counts and gonadal exams were conducted within populations of *Diadema* from the following areas: Curacao, Netherlands Antilles; Barbados, West Indies; U.S. Virgin Islands; British Virgin Islands; Puerto Rico; Grand Cayman, British West Indies; Nassau, Bahamas; Florida Keys, and Bermuda. To determine mean population densities, all sizes of *Diadema* were counted within successive m^2 -quadrats along transects which were randomly chosen and varied in length according to the site involved. Only daytime counts were made because of the mobility of the *Diadema* at night when exposed to light. The population densities reported are qualitative observations.

ANNO

06/08/1987

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ACC 2056

TYPE P

YEAR 1969

AUTH BAULT, E.I.;

TITL A STUDY OF THE DISTRIBUTION AND THE ZOOGEOGRAPHY OF THE POLYCHAETOUS ANNELI
DS OF THE CONTINENTAL SHELF IN THE NORTHEASTERN GULF OF MEXICO.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW DISTRIBUTION

ZOOGEOGRAPHY

POLYCHAETE

ABST Polychaetes were obtained from bottom samples taken during November 1967 along the northeastern Gulf continental shelf to a depth of 183 m. Of the 4 major groups, the first consisted of species occurring on the Atlantic coast of the U.S. The second group were those endemic to the Gulf of Mexico. The third group was composed of polychaetes found in the West Indies, Bermuda, and Florida Keys areas. The fourth group was circumtropical circummediterranean. The large number of tropical and subtropical species was the most outstanding feature of this study of polychaetes.

ANNO

06/08/1987

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ACC 605
TYPE
YEAR 1980
AUTH BEA, R.G.;AUDIBERT, J.M.E.;
TITL OFFSHORE PLATFORMS AND PIPELINES IN MISSISSIPPI RIVER DELTA.

BIBL J. GEOTECH. ENG. DIV., AM. SOC. CIV. ENG. 106:853-869 (PAPER 15645).

KEYW DRILLING PLATFORMS GEOLOGY PHYSICAL PROCESS
PIPELINE SEDIMENT TRANSPORT

ABST

ANNO

06/08/1987

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ACC 4246

TYPE P

YEAR 1983

AUTH BEA, R.G.;

TITL HURRICANE WAVE HEIGHT AND FORCES-4: DESIGN WAVE FORCES ESCALATE TO "100-YEAR" CONDITIONS TO CONSIDER STORMS, DRAG, FOULING.

BIBL OIL GAS J. 81(43):95-99.

KEYW WAVE

CURRENTS

PHYSICAL PROCESS

STORM

HURRICANE

FOULING

DRILLING PLATFORM

ABST In the previous articles, the attenuation of wave heights across the Gulf's continental shelf was examined. More wave attenuation was found than was previously recognized. This article integrates these findings with other considerations regarding hurricane wave and current forces the results being the development of a design wave force level similar to the API reference level for shallow water platforms in the Gulf of Mexico. A chronology of design basis wave forces.

ANNO

06/08/1987

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ACC 4247

TYPE P

YEAR 1983

AUTH BEA, R.G.;

TITL HURRICANE WAVE HEIGHT AND FORCES-3: WAVE-HEIGHT ATTENUATION MODELED BY COMPUTER PROGRAM FOR SHALLOW WATER IN GULF.

BIBL OIL GAS J. 81(41):114-120.

KEYW WAVE

MODEL

HURRICANE

PHYSICAL PROCESS

ABST This third article in a series of five describes a computer program which models shallow-water wave-height attenuation, i.e., various dissipative physical processes previously described. The wave-attenuation model calibration is then discussed the result being a statistical distribution of shallow-water wave conditions for three subregions of the western Gulf of Mexico Continental Shelf.

ANNO

06/08/1987

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ACC 4271

TYPE P

YEAR 1983

AUTH BEA, R.G.;LAI, N.W.;MOORE, G.H.;NIEDORODA, A.W.;

TITL GULF OF MEXICO SHALLOW-WATER WAVE HEIGHTS AND FORCES.

BIBL OFFSHORE TECHNOL. CONF. (UNITED STATES) 3:49-68.

KEYW WAVE

STORM

ABST The purpose of this study was to develop a rational procedure for establishing environmental design conditions for platforms in relatively shallow water in the Gulf of Mexico. This paper discusses two parts of this study. The first part is that of developing and calibrating a procedure for determining the amount of storm wave height reduction due to dissipation of wave energy through fluid shear stresses acting on the seafloor of the Continental Shelves. The second part is that of developing and justifying a wave force parameterization procedure to quantify wave force levels on typical jacket structures in the Gulf of Mexico.

ANNO

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ACC 587

TYPE

YEAR 1982

AUTH BEARD, J.H.;SANGREE, J.B.;SMITH, L.A.;

TITL QUATERNARY CHRONOLOGY, PALEOCLIMATE, DEPOSITIONAL SEQUENCES, AND
EUSTATIC CYCLES.

BIBL AM. ASSOC. PET. GEOL. BULL. 66(2):158-169.

KEYW QUATERNARY	CHRONOLOGY	CONTINENTAL SHELF
CONTINENTAL SLOPE	GEOLOGY	SEISMIC REFLECTION
EUSTATIC CHANGE	PLEISTOCENE	SEDIMENTOLOGY
GEOLOGIC STRUCTURE		

ABST Pleistocene alternations of ocean volumes, expressed as relative changes in sea level, are symptomatic of the accumulation and melting of continental ice sheets and resulted in lowstands of sea level during glacial periods and highstands during interglacial periods. A lowstand-highstand couplet constitutes a eustatic cycle. Eight cycles that occurred during the last 2.5 to 3.0 m.y. are recognized in the Gulf Coast region. These cycles are identified by multiple criteria, including paleontologic, sedimentologic, and seismic evidence. Eustatic cycle concepts can be used in seismic stratigraphy to identify seismic (depositional) sequences. Such seismic-sequence analyses are based on identification of discrete stratigraphic units within relatively conformable intervals of strata by using reflection patterns on the seismogram. For example, glacial periods may exhibit chaotic bedding surfaces on the seismogram, whereas interglacial periods may display parallel bedding surfaces. Seismic sequence analyses provide a sound basis for applying the global system of geochronology to seismic data for the improvement of stratigraphic and structural interpretations. Moreover, seismic sequence analyses in new exploration areas allow for reliable predictions of geologic age ahead of drilling and facilitate preliminary tectonostratigraphic reconstructions.

ANNO

06/08/1987

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ACC 2385

TYPE P

YEAR 1975

AUTH BEARDSLEY, G.L.; COSTELLO, T.J.; DAVIS, G.E.; JONES, A.C.; SIMMONS, D.C.;

TITL THE FLORIDA SPINY LOBSTER FISHERY: A WHITE PAPER.

BIBL FLA. SCI. 38(3):144-149.

KEYW MONROE
MANAGEMENT

SPINY LOBSTER
FISHERY STATISTICS

FISHERY

ABST Management practices were suggested for Florida spiny lobster fishery to combat declining catch rates, resulting from increasing fishing pressure by commercial and recreational fishermen. A two-phase management program was proposed: 1) allocate the resource effectively between commercial and recreational components, institute uniform interstate regulations to protect the resource, and increase the collection of fishery statistics for both commercial and recreational harvests; and 2) establish a management scheme based on additional research to obtain the optimum sustainable yield.

ANNO

06/08/1987

.....
ACC 1204
TYPE P
YEAR 1976
AUTH BEAUMARIAGE, D.S.;LITTLE, E.J.;
TITL STATUS REPORT OF FLORIDA'S RESEARCH ON SPINY LOBSTER BIOLOGY.

BIBL PROC. GULF CARIBB. FISH. INST. 28TH ANNU. SESS. OCT. 1975:102-107.

KEYW SPINY LOBSTER	LARVAL	RECRUITMENT
BEHAVIOR	MIGRATION	GROWTH
POPULATIONS	POPULATION DYNAMICS	COMMERCIAL FISHERY
CRUSTACEA		

ABST Research on the population dynamics of Florida's spiny lobster was reviewed to summarize existing knowledge for use in evaluating management concepts. Development of larval lobsters and their method of recruitment have been studied intensively although larval stages cannot yet be identified to species. Recent use of SCUBA for in situ observations has increased knowledge of lobster behavior and migration. Understanding of spiny lobster population dynamics has been hindered by the lack of information on growth and the relationship between age and lobster size. The effects of fishing pressure on the structure of juvenile and adult populations is assessed. Increased investigation of lobster stocks in deeper water and areas peripheral to the main fishing grounds may provide information concerning lobster growth, migration, recruitment, interactions with inshore populations, and the potential as alternative fisheries.

ANNO

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ACC 213

TYPE

YEAR 1982

AUTH BECCASIO, A.D.; FOTHERINGHAM, N.; REDFIELD, A.E.; FREW, R.L. ET AL.

TITL GULF COAST ECOLOGICAL INVENTORY. USER'S GUIDE AND INFORMATION BASE.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, D.C. FWS/OBS-82/55. 191 PP.

KEYW BARRIER ISLAND	COASTAL RESOURCE	COASTAL WATER
COASTAL ZONE	ECOLOGY	ECOSYSTEM
EXPLORATION	INDUSTRY	

ABST This study provides an inventory of important ecological resources along the Gulf Coast, an area of some 475,000 square kilometers (183,400 square miles). This inventory is intended to provide government and industry decision makers with valuable ecological information which will assist in the regional siting of oil and gas processing and manufacturing facilities and their respective transportation systems. The preparation of this ecological inventory involved four major tasks: the collection, review, and analysis of available data on coastal fish and wildlife species and their habitats and special land use areas; the synthesis and compilation of these data into a format which is compatible with the requirements of 1:250,000-scale mapping; the preparation of a series of 22 resource inventory graphics for the Gulf Coast; and the preparation of a report narrative keyed to the inventory graphics. The report is organized in accordance with the hierarchical classification scheme for coastal ecosystems devised by Terrell (1979). Ecological resources are summarized by their appropriate geographic zone, and descriptions and locations of species with special status and aquatic and terrestrial species of high commercial, recreational, and aesthetic value are included. The designation of more than 270 special land use areas along the Gulf Coast is also provided.

ANNO

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ACC 4211
 TYPE P
 YEAR 1979
 AUTH BEDINGER, C.A., JR.;
 TITL ECOLOGICAL INVESTIGATIONS OF PETROLEUM PRODUCTION PLATFORMS IN THE CENTRAL
 GULF OF MEXICO--PRELIMINARY FINDINGS.

BIBL IN: PROC. 11TH ANNU. OFFSHORE TECH. CONF. 4:2149-2161.
 OFFSHORE TECHNOLOGY CONFERENCE, HOUSTON, TX. 30 APRIL 1979.

KEYW ARTIFICIAL REEF HYDROGRAPHY HYDROCARBON
 SEDIMENT TRACE METAL BENTHIC
 FOULING FISH POLLUTION

ABST Southwest Research Institute is presently managing a relatively large program in offshore ecology for the Bureau of Land Management. Project objectives are to assess the long term cumulative effects of production platform operation on the Outer continental shelf (OCS) environment, and further define their "artificial reef" effect. These results are then to be used in helping formulate future research on the OCS, indicate monitoring techniques and, to review present "benchmark" studies. The study area covers a broad expanse of the Louisiana "oilpatch" from the Mississippi delta, west 200 miles and offshore 100 miles. Twenty-four stations have been visited during late spring and late summer, 1978, and winter, 1979, with four platforms sampled as primary sites during each season, 16 as secondary sites in the late summer and four controls in each season. The program was designed to cover all production types, ages and surrounding ecosystems normal to the north central Gulf of Mexico. Collections and analyses have included basic hydrography; hydrocarbons in water, sediments and biota; trace metals from similar samples; sediment physical characterization; benthic microbiology; benthic biota; histopathology in fish and invertebrates; and platform associated fouling organisms and fish. This paper presents data from initial sampling and gives observations of trends. The major observations realized are that the Mississippi River overshadows man's activities in affecting the environment in that it overrides ocean water over a considerable area in the nearshore during the summer months causing an oxygen decline and subsequent

ANNO

06/08/1987

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ACC 1205

TYPE P

YEAR 1977

AUTH BEHENSKY, J.F.;

TITL REASSESSMENT OF THE DISTRIBUTION OF BENTHIC FORAMINIFERA OF THE SHELF AND SLOPE OF THE ATLANTIC MARGIN AND GULF OF MEXICO OF THE UNITED STATES.

BIBL UNIV. OF MIAMI M.S. THESIS. 119 P.

KEYW FORAMINIFERA

BENTHIC

TEMPERATURE

DEPTH

SEDIMENT

CONTINENTAL SHELF

CONTINENTAL SLOPE

DISTRIBUTION

ABST Distribution patterns of benthic foraminifera from the eastern and southern margins of the United States were determined based on approximately 1000 precompiled samples. In addition to temperature and depth, sediment type was analyzed as a controlling parameter in foram distribution. Sediment distribution was found to correlate closely with generic level foram distribution.

ANNO

06/08/1987

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ACC 1206
TYPE P
YEAR 1977
AUTH BEHENSKY, J.F.;
TITL

BIBL

KEYW

ABST

ANNO

06/08/1987

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ACC 1207

TYPE P

YEAR 1977

AUTH BEHENSKY, J.F.;

TITL REASSESSMENT OF THE DISTRIBUTION OF BENTHIC FORAMINIFERA OF THE SHELF AND SLOPE OF THE ATLANTIC MARGIN AND GULF OF MEXICO OF THE UNITED STATES.

BIBL UNIV. OF MIAMI M.S. THESIS. 119P.

KEYW FORAMINIFERA
DEPTH

BENTHIC
SEDIMENT

TEMPERATURE

ABST Distribution patterns of benthic foraminifera from the eastern and southern continental margins of the United States were determined based on approximately 1000 precompiled samples. In addition to temperature and depth, sediment type was analyzed as a controlling parameter in foram distribution. Sediment distribution was found to correlate closely with generic level foram distribution.

ANNO

06/08/1987

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ACC 4001
TYPE P
YEAR 1977
AUTH BEHRINGER, D.W.;MOLINARI; R.L.;FESTA, J.F.;
TITL THE VARIABILITY OF ANTICYCLONIC CURRENT PATTERNS IN THE GULF OF MEXICO.

BIBL J. GEOPHYS. RES. 82(34):5469-5476.

KEYW PHYSICAL	OCEANOGRAPHY	CIRCULATION
LOOP CURRENT	HYDROGRAPHY	EDDY FORMATION
INTRUSION	CURRENTS	TEMPERATURE
GYRE		

ABST A recent twofold increase in the number of temperature observations available in the Gulf of Mexico has prompted a reappraisal of several ideas regarding the temporal variability of the Loop Current in the eastern gulf and the anticyclonic gyre in the western gulf. The analysis includes both synoptic data drawn from 47 cruises in the eastern gulf and monthly maps of temperature at 200 m prepared from observations over the entire gulf. It is found that on average the penetration of the Loop Current into the gulf increases during the winter and spring, reaching a maximum in the early summer, at which time a large anticyclonic eddy probably separates from the loop. It is also found that there are substantial deviations from this average sequence of events; during the past dozen years the period between eddy separations has been as short as 8 months and as long as 17 months. The data coverage of the western gulf is sparse, but there is evidence for the year-round persistence of the anticyclonic gyre and some indications that the gyre may be strongest in summer and winter.

ANNO

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ACC 4269
TYPE {
YEAR 1981
AUTH BEHRENS, E.W.;MIDDLEDITCH, B.S.;
TITL TOTAL ORGANIC CARBON AND CARBON ISOTOPES OF SEDIMENTS. THE BUCCANEER GAS AND OIL FIELD STUDY.

BIBL SYMP. BUCCANEER GAS AND OIL FIELD STUDY, HOUSTON, TX. PLENUM PUBLISHING COMPANY, NEW YORK. 117-130 P.
KEYW ORGANIC CARBON SEDIMENTS OIL DRILLING

ABST This paper considers whether the isotopes of carbon in the organic matter of the sediments within and around the Buccaneer field indicate that any alteration of the sedimentary organic matter has resulted from drilling and producing operations. Samples of surficial marine sediments were removed from short cores and samples of older sediments from long piston cores. To develop a predictive model of carbon isotope effects, the specific difference between produced crude and background organic carbon stable isotopes is determined. Results for total organic carbon, stable organic isotopes, and radiocarbon are given. Erosion is indicated both by radiocarbon ages and sedimentation rates of surficial sediments, and these trends fit the predictive model of carbonaceous contamination. A bimodal stable carbon isotope ratio distribution suggests a contamination mode in which the material does not diminish with distance but bypasses a considerable distance before it is deposited. The study area lies between two continental shelf areas with distinct stable carbon isotope differences of sufficient magnitude to account for the two frequency modes found in the Buccaneer field area.

ANNO

06/08/1987

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ACC 437

TYPE

YEAR 1971

AUTH BELLINGER, J.W.;

TITL FOOD HABITS OF JUVENILE POMPANO, TRACHINOTUS CAROLINUS, IN LOUISIANA.

BIBL TRANS. AM. FISH. SOC. 100(3):486-494.

KEYW BIOLOGY

FEEDING HABIT

COASTAL WATER

FISH

ECOLOGY

JUVENILE

ABST

ANNO

06/08/1987

.....
ACC 2057

TYPE P

YEAR 1981

AUTH BELL, S.S.; MCCLINTOCK, J.B.;

TITL INVERTEBRATES ASSOCIATED WITH ECHINODERMS FROM THE WEST COAST OF FLORIDA
WITH SPECIAL REFERENCE TO HARPACTICOID COPEPODS.

BIBL INTERNAT. ECHINODERM CONF. TAMPA, FL. SEPT. 24-27, 1981.

KEYW INVERTEBRATE

ECHINODERM

ASSEMBLAGE

MACROFAUNA

MEIOFAUNA

CRUSTACEA

HABITAT

ABST Meiofauna and macrofauna were collected from three echinoderm species from the Gulf coast of Florida. Harpacticoid copepods numerically dominated the echinoderma-associated assemblages. Nematodes, amphipods, and ostracods were also abundant on *L. variegatus*, but were present in low numbers on *Arbacia punctulata* and *Echinaster* sp. The high densities of associated invertebrates on *L. variegatus* are believed to be a result of the echinoid's covering response which provides microhabitats for small invertebrates.

ANNO

06/08/1987

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ACC 2213

TYPE P

YEAR 1979

AUTH BELL, C.K.;

TITL NITROGEN FIXATION (ACETYLENE REDUCTION) ASSOCIATED WITH SEAGRASSES ALONG THE NORTHERN FLORIDA GULF COAST.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW BIOMASS

DEPTH

SEAGRASS

SEDIMENT GRAIN SIZE

NUTRIENT

ORGANIC CARBON

NITROGEN

LIGHT

ABST Investigation of nitrogen fixation associated with the seagrasses *Thalassia testudinum*, *Syringodium filiforme* and *Halodule wrightii* was conducted during June-August 1978 on the northern Gulf coast. At one station, N-fixation, leaf area index, and leaf plus epiphyte biomass decreased with depth, suggesting that light influences seagrass and epiphyte growth and the N-fixation associated with epiphytes. The amount of organic matter increased from west to east stations, which was accompanied by increases in epiphyte biomass and N-fixation and a decrease in root biomass. These results support the hypothesis that the morphology of *T. testudinum* is related to the percentage of ash free dry weight of the sediment, which indirectly affects N-fixation.

ANNO

06/08/1987

.....
ACC 2257

TYPE P

YEAR 1983

AUTH BELL, S.S.;DEVLIN, D.J.;

TITL SHORT-TERM MACROFAUNAL RECOLONIZATION OF SEDIMENT AND EPIBENTHIC HABITATS I
N TAMPA BAY, FLORIDA.

BIBL BULL. MAR. SCI. 33(1):102-108.

KEYW POLYCHAETE
DEFAUNATION

CRUSTACEAN
MACROFAUNA

SEDIMENT
POLYCHAETE

ABST Macrofaunal recolonization of experimentally defaunated sediments and epibenthic tubecaps was studied in Tampa Bay, Florida, over the time scale of hours and days. In both infaunal and epifaunal systems, adult age classes rapidly colonized experiment treatments. Within 7.5 h after defaunation of sediment patches (100 cubic centimeter) densities of dominant macrofauna returned to control levels. Demersal tap evidence suggested that benthic crustaceans and adults of the polychaete *Polydora ligni* were present in the water column during our field investigation. Macrobenthic polychaetes and amphipods repopulated defaunated epibenthic structure (*Diopatra cuprea* tubecaps) within 1.8 d by moving through the water column and/or sediments.

ANNO

06/08/1987

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ACC 4002

TYPE P

YEAR 1982

AUTH BELL, F.W.; SORENSON, P.E.; LEEWORTHY, V.R.;

TITL THE ECONOMIC IMPACT AND VALUATION OF SALTWATER RECREATIONAL FISHERIES IN FLORIDA.

BIBL FLORIDA SEA GRANT REP. NO. 47.

KEYW RECREATIONAL FISHERY SOCIOECONOMIC COASTAL

ABST This project quantified both market and nonmarket value and economic importance of Florida's saltwater recreational fishery, a significant but poorly described element in the state's economy and multi-billion dollar tourist industry. During 1980-1981, 2,177,217 anglers 18 years and older engaged in saltwater recreational angling. Approximately 78% of all resident angler fishing days were spent within Florida's territorial waters. Resident anglers spent approximately \$1.1 billion at the retail level or \$508.97 per angler during 1980-1981. 20,368 retail employees in Florida depend on resident saltwater recreational fisheries for their livelihood. Nearly 57% of all resident saltwater anglers were willing to pay at least \$6.75 for a saltwater fishing license. During 1980-1981, 3,047,322 tourist anglers 18 years or older engaged in saltwater recreational fishing. Approximately \$.763 billion were spent directly by tourist saltwater anglers at the retail level.

Approximately \$3.95 billion were directly and indirectly generated by tourist saltwater anglers. 103,510 employees in Florida depend on direct and indirect expenditures generated by tourists on saltwater recreational fishing. Over 52% of all tourist saltwater anglers were willing to pay at least \$10.50 for a saltwater license.

ANNO

06/08/1987

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ACC 2237

TYPE P

YEAR 1971

AUTH BENDER, E.S.;

TITL STUDIES OF THE LIFE HISTORY OF THE STONE CRAB, MENIPPE MERCENARIA (SAY), IN
THE CEDAR KEY AREA.

BIBL MASTER'S THESIS. UNIVERSITY OF FLORIDA. GAINESVILLE, FL.

KEYW LIFE HISTORY
SEAGRASS

STONE CRAB
HABITAT

SPONGE

ABST The life history of the stone crab, *Menippe mercenaria*, was studied at Cedar Key, Florida. Females with eggs were commonly found in burrows on Thalassidroma grassflats in the spring through late summer, and most males were found there in the fall. Juveniles were most abundant on shell bottoms, grassflats, sponge, and rock. Many juveniles were found to move to oyster bars the following spring. Sexual maturity was probably reached the second fall.

After mating in winter, females moved to deep grassflats and channels, while many males moved to deep water and offshore in the spring. Apparently two populations exist - one population offshore, mostly males, migrates in the early winter for mating and possibly for protection from predators; and a second population, mostly females, remains inshore all year and spawns from March to October. Stridulation is described, but function was not determined for this process. Adult crabs need several molts to replace a new claw that is large enough to be commercially harvested for the second time. Harvest of the entire male crab over 8.5 cm carapace width is suggested to replace the present practice of claw removal.

ANNO

06/08/1987

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ACC 438

TYPE

YEAR 1973

AUTH BENNETT, J.A.;

TITL FOOD HABITS AND FEEDING CHRONOLOGY OF THE LONGNOSE KILLIFISH, FUNDULUS SIMILIS (BAIRD AND GIRARD) FROM ST. LOUIS BAY, MISSISSIPPI.

BIBL MASTER'S THESIS. MISSISSIPPI STATE UNIVERSITY, HATTISBURG, MS. 32 PP.

KEYW BIOLOGY
FISH

ECOLOGY

FEEDING HABIT

ABST

ANNO

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ACC 246
 TYPE
 YEAR 1971
 AUTH BERGANTINE, R.N.;
 TITL SUBMARINE REGIONAL GEOMORPHOLOGY OF THE GULF OF MEXICO.

BIBL GEOL. SOC. AM., BULL. 82:741-752.

KEYW CONTINENTAL SHELF	GEOLOGY	GEOMORPHOLOGY
TOPOGRAPHY	CONTINENTAL SLOPE	SEDIMENT
DIAPIR	PLEISTOCENE	

ABST Recent surveys and investigations in the Gulf of Mexico have provided sufficient new data to warrant an updated regional geomorphic classification. The Gulf region is divided, according to the methods used by geomorphologists for continental areas, into three major geomorphic divisions and sixteen provinces. Some of the provinces are further subdivided into sections and subsections. Most sections of the continental shelf contain Pleistocene wave-cut terraces. The lowest terraces generally lie near a depth of 65 fm. The continental slope is considered here to be a major geomorphic division, rather than a province, because of its variety of landforms and areal differences in geomorphic history. The steepness of the continental slope ranges from 2 deg. on the DeSoto Slope to greater than 45 deg. over limited areas of the reef-formed West Florida and Campeche Escarpments. Diapirs underlie all non-carbonate slopes and have largely altered the pre-existing topography. Great thicknesses of evenly bedded sediments underlie the Gulf floor. The deeper sediments were derived from the northwest and pre-date the salt tectonism that produced the Sigsbee Escarpment and the numerous diapirs.

ANNO

06/08/1987

.....
ACC 2040
TYPE P
YEAR 1967
AUTH BERRY, R.J.;
TITL DYNAMICS OF THE TORTUGAS (FLORIDA) PINK SHRIMP POPULATION.

BIBL PH.D. THESIS. UNIVERSITY OF RHODE ISLAND. KINGSTON, RI.

KEYW PINK SHRIMP	POPULATION	FISHERY
DECAPOD	TAGGING	STRESS
MANAGEMENT		

ABST An analysis of historical information, a 3 yr. interview survey, and two mark-recapture experiments were used to assess the penaeid shrimp population of the Tortugas. Results suggest that a reduction in fishing pressure and management to increase the size of shrimp first exposed to capture would benefit the fishery.

ANNO

06/08/1987

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ACC 4215

TYPE P

YEAR 1977

AUTH BERRY, R.J.;MCRAE, E.D.;

TITL ENVIRONMENTAL ASSESSMENT OF AN OFFSHORE OIL FIELD: A PROGRESS REPORT.

BIBL IN: 'PROG. REV. PROC. ENVIRON. EFFECTS OF ENERGY RELATED ACTIVITIES ON MAR.
/ESTUAR. ECOSYSTEMS' REPT. NO. EPA-600/7-77-111 AND DEMI-77-025. 143-152.

KEYW FISHING

POLLUTION

SHRIMP

ABST The area selected for study is the Buccaneer Oil Field located about 53 km (32 miles) south of Galveston. This field was chosen because it is isolated from other production areas and has been in operation long enough to allow development of climax communities. Situated in commercial shrimping grounds, it is a focal point for recreational fishing and diving activities. Objectives of the study are to compare ecosystems in the vicinity of a producing field with those in nearby unaltered areas and to identify changes attributable to pollutants and the presence of structures.

ANNO

06/08/1987

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ACC 1208

TYPE P

YEAR 1978

AUTH BERT, T.M.; WARNER, R.E.; KESSLER, L.D.;

TITL THE BIOLOGY AND FLORIDA FISHERY OF THE STONE CRAB, MENIPPE MERCENARIA (SAY)
, WITH EMPHASIS ON SOUTHWEST FLORIDA.

BIBL FLA. SEA GRANT TECH. PAP. NO. 9. 82 P.

KEYW STONE CRAB
BIOLOGY

FISHERY
INVERTEBRATES

DECAPOD
COMMERCIAL FISHERIES

ABST This report summarizes the knowledge regarding the natural history of the stone crab, and evaluates the stone crab fishing industry. Baseline data for future use in monitoring a commercially exploited area was given. The relation of the southwest Florida stone crab fishery to that of the rest of the state was discussed.

ANNO

06/08/1987

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ACC 2164

TYPE P

YEAR 1983

AUTH BERT, T.M.;

TITL BIASES INHERENT IN INFERRING THE POPULATION DYNAMICS OF A LARGE MOBILE
DECAPOD CRUSTACEAN WHEN USING TRAPS FOR SAMPLING.

BIBL PRESENTED AT BENTHIC ECOL. MEET., FLORIDA INSTITUTE OF TECHNOLOGY,
MELBOURNE, FL.

KEYW POPULATION DYNAMICS STONE CRAB

ABST Data from several studies were used to examine bias in sampling of stone crabs (*Menippe mercenaria*) with traps. Changes in the population structure of the trapped crabs varied with trap type, duration between samplings, season and composition and density of the sampled populations. Caution against similar biases in trapping studies of other large mobile decapod crustaceans is advised.

ANNO

06/08/1987

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ACC 2165

TYPE P

YEAR 1983

AUTH BERT, T.M.;DODRILL, J.;DAVIS, G.E.;TILMONT, J.;

TITL THE POPULATION DYNAMICS OF THE STONE CRAB (MENIPPE MERCENARIA) IN EVERGLADES AND BISCAYNE NATIONAL PARKS.

BIBL FLA. SCI. 46(SUPPL. 1):24.

KEYW POPULATION DYNAMICS
ABUNDANCE

STONE CRAB
GROWTH

DISTRIBUTION
MIGRATION

ABST Temporal and spatial variations in the distribution, abundance, sex, ratio, size class frequency, and reproductive effort of stone crabs (*Menippe mercenaria*) were investigated for one year throughout south Florida nearshore waters. A major nursery area for stone crabs was discovered offshore from the Big Cypress and Everglades estuaries. It was hypothesized that crabs from that area disperse southward through Florida Bay and the Florida Keys. Stone crabs trapped in Biscayne National Park were not locally restricted, but may be migrating from farther north along the Florida east coast.

ANNO

06/08/1987

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ACC 2058

TYPE P

YEAR 1979

AUTH BIERI, R.;

TITL HYDROCARBONS IN DEMERSAL FISH, MACROEPIFAUNA, AND ZOOPLANKTON.

IN: MAFLA FINAL REPT. (THE MISSISSIPPI, ALABAMA, FLORIDA OUTER
CONTINENTAL SHELF BASELINE ENVIRON. STUDY. 1977/1978.

BIBL DAMES & MOORE FOR BLM CONTR. #AA550-CT7-34. VOL. II, CH. 9:531-571.

KEYW HYDROCARBON
ZOOPLANKTON

DEMERSAL FISH
MAFLA

EPIFAUNA

ABST As part of a large study of the biota of the Mississippi, Alabama and west Florida continental shelves, the tissues of demersal fish, macroepifauna and zooplankton were analyzed for hydrocarbon content. Hydrocarbon fractions were identified, and spatial trends of hydrocarbon distribution over the study area were discussed. Little evidence for the presence of petroleum was found in demersal fish or macroepifauna.

ANNO

06/08/1987

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ACC 2220

TYPE P

YEAR 1970

AUTH BISHOP, J.M.

TITL BURYING, GROWTH, AND MOLTING OF PINK SHRIMP *PENAEUS DUORARUM* UNDER PHOTOPERIODS OF WHITE LIGHT AND U-V LIGHT.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW PINK SHRIMP

LIGHT

GROWTH

ABST Comparative effects of different photoperiods of UV light and white light on the burying, growth and molting of *Penaeus duorarum* were studied under controlled conditions. Statistically significant differences for growth and molting rates were not evident when data were analyzed on an average daily basis. Ecdysis occurred during scotophase of any photo period. A circadian burying activity was found in shrimp exposed to continuous UV light. Shrimp kept in continuous darkness molt significantly more during the time coinciding with scotophase, and thus exhibited a weak endogenous molt rhythm. The poorest growth occurred in groups exposed to UV light and best under constant dark and 12 hour light:12 hour dark conditions. Since approximated maximum daily growths were found to be less than the best estimates of natural growth, it was suggested that other factors (crowding, available space, food, water quality and cannibalism) might be involved.

ANNO

06/08/1987

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ACC 2221

TYPE P

YEAR 1976

AUTH BITTAKER, H.F.; IVERSON, R.L.;

TITL THALASSIA TESTUDINUM PRODUCTIVITY: A FIELD COMPARISON OF MEASUREMENT METHODS.

BIBL MAR. BIOL. 37(1):39-46

KEYW PRIMARY PRODUCTIVITY CARBON
CARBON-14

SEAGRASS

ABST Net primary production rates in *Thalassia testudinum* from the NE Gulf of Mexico were measured during a study comparing the Wetzel inorganic ¹⁴C uptake and Zieman leaf biomass techniques of measuring primary production rates. There were no significant differences for the two methods when the ¹⁴C uptake technique was corrected for sediment ¹⁴C "uptake", incubation chamber energy absorption, and differences in total light energy. The results confirm previous evidence that the ¹⁴C technique estimates net particulate-carbon production.

ANNO

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ACC 4004
 TYPE P
 YEAR 1981
 AUTH BLAHA, J.; STURGES, W.;
 TITL EVIDENCE FOR WIND-FORCED CIRCULATION IN THE GULF OF MEXICO.

BIBL J. MAR. RES. 39(4):711-734.

KEYW CIRCULATION	DYNAMIC HEIGHT	WIND STRESS
PHYSICAL	OCEANOGRAPHY	SEASONALITY

ABST A study is conducted into the response of sea level and dynamic height to fluctuations of alongshore wind stress and wind stress curl at periods greater than a few months per cycle. Monthly tide gauge data from Key West to Progreso, Mexico, during 1954 to 1974 are adjusted to remove the effects of local atmospheric pressure and seasonal steric heating. The adjusted mean monthly sea level elevations are significantly greater from Progreso to Port Isabel than they are elsewhere in the Gulf. This observation remains unchanged after the elevations are reduced for the effect of local alongshore winds. Among the tide gauges in the western Gulf, Galveston is the most coherent with the local alongshore wind forcing at periods greater than 2 months per cycle, exhibiting a phase with the winds not significantly different from phase. At the other coastal sites, at least half of the elevation signal remains. This residual signal is presumed to be caused by the geostrophic fluctuations of an offshore boundary current. The available wind data from the western half of the Gulf show a negative wind stress curl; the mean is -1.1×10^{-1} dyne/cubic centimeter and curl is most negative in July. A common feature in the sea level elevations from Progreso to Port Isabel and in curl is the sharp transition from summer to fall. It is suggestive of a seasonal component to the Gulf circulation forced by the wind stress curl. This transition occurs from July to September in curl but from August to October in sea level, a one month lag. The observed 17 cm of change in elevation corresponds to 23×10^{-1} dyne/cubic centimeter of change in curl. A mean

ANNO

06/08/1987

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ACC 2060
TYPE P
YEAR 1977
AUTH BLAKE, N.J.;
TITL INFAUNAL MACROMOLLUSCAN ASSEMBLAGES OF THE EASTERN GULF OF MEXICO, 1975-76.

BIBL UNPUBL. REPT. U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND
MANAGEMENT, WASHINGTON, DC. 43 P.

KEYW INFAUNAL	MOLLUSC	DIVERSITY
SEASON	DEPTH	LATITUDE
TEMPERATURE	SALINITY	DO
SEDIMENT		

ABST This report presents the results of the macroinfaunal molluscs study of the Bureau of Land Management sponsored program in the Mississippi, Alabama, Florida (MAFLA) outer continental shelf. One hundred forty one taxa of gastropods, 120 taxa of bivalves, 13 taxa of scaphopods, 7 taxa of polyplacophorans and 1 aplacophoran taxa were obtained from the study. Abundance of each of the 282 taxa ranged from 1 individual/0.54 square meters to 605 individuals/0.54 square meters. Shannon-Weaver diversity index values ranged from 0.26 to 3.36 and generally decreased offshore. Seasonal and spatial variations were present in both density and diversity. A classification analysis distinguished five major clusters. These faunal breaks appeared to be only partially related to sediment classification. Season, depth, latitude, and sampling problems appeared to be some of the other important factors

ANNO

06/08/1987

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ACC 2061
TYPE P
YEAR 1978
AUTH BLAKE, N.J.;
TITL HISTOPATHOLOGY OF EPIFAUNAL INVERTEBRATES OF THE EASTERN GULF OF MEXICO.

IN: MAFLA FINAL REPORT (THE MISSISSIPPI, ALABAMA, FLORIDA OUTER
CONTINENTAL SHELF BASELINE ENVIRONMENTAL STUDY. 1977/1978).

BIBL DAMES AND MOORE, INC. FOR BUREAU OF LAND MANAGEMENT CONTRACT
#AA550-CT7-34. VOL. II, (18):837-860.

KEYW PATHOLOGY EPIFAUNA INVERTEBRATE
MAFLA

ABST Since 1975, 14,732 slides were made and analyzed for pathological conditions. Ninety-eight epifaunal species are represented by the slides. The incidence of pathological conditions potentially induced by hydrocarbons was completely absent. The fauna of the study area may be described as healthy and the environment pristine in comparison to other shelf areas.

ANNO

06/08/1987

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ACC 2195
TYPE P
YEAR 1979
AUTH BLAKE, N.J.;
TITL INFAUNAL MACROMOLLUSCS OF THE EASTERN GULF OF MEXICO.

BIBL MAFLA REPT. SUBMITTED TO DAMES & MOORE, INC. FOR U.S. DEPARTMENT OF THE
INTERIOR, BUREAU OF LAND MANAGEMENT. CONTRACT #AA50-CT7-34. P. 668-698.
KEYW INFAUNAL MOLLUSC SEASON
SEDIMENT TEMPERATURE DEPTH
MAFLA

ABST The macromolluscs of the Eastern Gulf of Mexico were sampled over 7 seasons from 1975 to 1978. A total of 322 taxa were identified. The list includes both temperate and tropical species. In the northern sections of the Eastern Gulf of Mexico the molluscs were highly influenced by the discharge of the Mississippi River and as a result the species richness and abundance were low; the species present were mostly deposit feeders which can survive the fine sediments. In the southern areas species richness and abundance increased, although they varied highly from one season to another and from one year to another. A total of 7 groups of stations resulted from cluster analysis. These groups appear to show a north-south linearity. Apparently the macromolluscan assemblages of the Eastern Gulf of Mexico are con

ANNO

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ACC 4005
 TYPE P
 YEAR 1983
 AUTH BLAKE, N.J.; DOYLE, L.J.;
 TITL INFAUNAL-SEDIMENT RELATIONSHIPS AT THE SHELF-SLOPE BREAK.

BIBL SOC. ECON. PALEON. MINERAL. SPEC. PUBL. 33:381-389.

KEYW INFAUNA	CONTINENTAL SHELF	CONTINENTAL SLOPE
BIOLOGY	BENTHIC	GRAIN SIZE
BIOMASS	MOLLUSCA	SEDIMENT
FOOD HABIT	INVERTEBRATES	ECOLOGY

ABST Infauna changes dramatically across the shelf-slope break, along with the physical and chemical parameters of the sediments and overlying water column. Grain size across the transition first increases slightly, then rapidly changes from sand to mud with concomitant increase in clay mineral and organic matter content. Light penetration decreases and there occurs a damping of seasonal temperature fluctuations. Infaunal assemblages change from those characterized by filter feeder organisms to those dominated by deposit feeders. Of the animals with hard parts likely to be preserved in the fossil record, the molluscan order nuculoida, composed of deposit feeders, is heavily represented seaward of the mudline. Biomass and density of organisms first decrease as grain size gets larger near the shelf edge then increase as the mudline is crossed, then decrease again in the mud downslope. Winnowing recycles fecal material from the shelf infaunal assemblages back into the water column. This contributes to the generally high productivity of shelf waters. Much of the feces seaward of the mudline is incorporated as part of the sediment, contributing to the relatively high organic content. Deposit feeders downslope of the mudline are the primary source of sediment reworking, while physical winnowing processes are more important at and adjacent to the shelf edge. In the sedimentary record, a sudden change in fossils from groups dominated by filter feeders to groups dominated by deposit feeders may indicate proximity to the shelf-slope break. Such a diagnostic change is associated with a decrease in fossil content of a sand layer

ANNO

06/08/1987

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ACC 744
TYPE
YEAR 1964
AUTH BOADEN, P.J.S.;
TITL GRAZING IN THE INTERSTITIAL HABITAT: A REVIEW.

IN: D.J. CRISP, ED. GRAZING IN THE MARINE ENVIRONMENT.

BIBL BLACKWELL PUBLISHERS, OXFORD, ENGLAND. 322 PP.

KEYW BENTHIC COMMUNITY BIOLOGY COASTAL WATER
FEEDING HABIT MEIOFAUNA SEDIMENT
LARVAL

ABST Marine sand provides three different types of habitat, the epi-, endo-, and mesopsammon. Little is known of the feeding habit of the interstitial(mesopsammic) fauna, though generalizations can be made. The basic food sources are detritus, dead plankton, bacteria and autotrophs, such as diatoms. Various mesopsammic and endopsammic species graze from individual sand grains. The interstitial fauna forms part of the food source of larger indiscriminate sand grazers. Very few intersitial species have pelagic larval development but dispersion of the fauna may be aided by shore-grazing birds. Thus grazing phenomena may affect the interstitial fauna in three ways - nutrition, depletion and dispersal.

ANNO

06/08/1987

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ACC 2062

TYPE P

YEAR 1980

AUTH BOBBIE, R.J.;

TITL CHARACTERIZATION OF THE STRUCTURE OF MARINE AND ESTUARINE BENTHIC AND FOULING MICROBIAL COMMUNITIES USING LIPID CHEMISTRY.

BIBL PH.D. DISSERTATION. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL. 162 P.

KEYW BENTHIC
BIOMASS
LIPID

FOULING
DIVERSITY
ESTUARY

COMMUNITY
RICHNESS
MACROFAUNA

ABST Assays for microbe derived lipid components were developed to aid in determining the structure of benthic microbial communities, which form the basis of trophodynamics in detrital and benthic ecosystems. Lipid analysis provided evidence for changes in biomass, relative dominance of prokaryotic and eukaryotic components, and species composition. Field verification studies revealed significant correlation between the fatty acids used to delineate microbial community structure and macrofaunal biomass, species diversity and species richness.

ANNO

06/08/1987

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ACC 2233
TYPE P
YEAR 1981
AUTH BOBBIE, R.J. ET AL.;
TITL EFFECT OF LIGHT ON BIOMASS AND COMMUNITY STRUCTURE OF ESTUARINE DETRITAL MICROBIOTA.

BIBL APPL. ENVIRON. MICROBIOL. 42(1):150-158.

KEYW COMMUNITY	ALGAE	LIGHT
BIOMASS	TEMPERATURE	SALINITY
DO		

ABST Variations in community structure were observed in estuarine detrital microbiota grown with and without light in the absence of macroscopic grazing by analysis of associated biochemical measures. Growth in light showed small increases in measures of procaryotes and microfauna. Algae and fungi biomass increased 10 to 15 times when grown in light. Increases in diatom growth were maximal in light, as confirmed by scanning electron microscopy.

ANNO

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ACC 2063
TYPE P
YEAR 1977
AUTH BOCK, W.D.;
TITL FORAMINIFERA OF THE MAFLA AREA (1975-76).

BIBL UNPUBL. REPT. SUBMITTED TO U.S. DEPARTMENT OF THE INTERIOR.
BUREAU OF LAND MANAGEMENT. WASHINGTON, DC. 23 P.

KEYW FORAMINIFERA	BENTHIC	DIVERSITY
DISTRIBUTION	SEASONAL	POLLUTANT
TEMPERATURE	SALINITY	DO
SEDIMENT	MAFLA	

ABST This report presents the results of the foraminifera study of the Bureau of Land Management sponsored program in the Mississippi, Alabama, Florida (MAFLA) outer continental shelf. The author presents a list of the dominant benthic foraminiferal species, diversity and evenness values and concludes: A comparison of living benthonic foraminiferal faunas of the MAFLA area from 1974 and 1975 indicates changes in species distribution and abundance occur naturally. At some stations these changes are relatively unimportant while others are extreme. The causes for extreme change at one station while a station immediately adjacent has relatively little change are not completely understood at present. Seasonal sampling should clarify the causes for these changes. Several foraminiferal trends have become apparent in the MAFLA area. Many of these are at least partially understood, but, again, seasonal sampling should clarify the reasons for the trends. Stress indicator species occur in the MAFLA area and further monitoring should enable us to achieve a better understanding of their reactions to natural changes in the environment in addition to providing a means for determining introduction of man made pollutants and their potential danger to the environment.

ANNO

06/08/1987

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ACC 2064
TYPE U
YEAR 1979
AUTH BOCK, W.D.;
TITL FORAMINIFERA OF THE MAFLA AREA.

BIBL REPT. SUBMITTED TO DAMES & MOORE, INC., FOR THE BUREAU OF LAND MANAGEMENT
MAFLA FINAL REPT. (1977-78). CONTRACT #AA550-CT7-34. P. 626-639.

KEYW FORAMINIFERA	BENTHIC	DEPTH
SEDIMENT	TEMPERATURE	SALINITY
DO	MAFLA	

ABST Sites along eight transects of the continental shelves of Mississippi, Alabama, and Florida (MAFLA) were sampled 4 times between summer of 1976 and winter of 1978 to examine benthic foraminifera community structure. Seasonal fluctuations in foraminiferal abundance were relatively small although abundance of major dominant species sometimes changed drastically. Comparisons of abundance and species composition are drawn with results from a 1975-76 study. Spatial trends of foraminifera in the MAFLA area are identified and related to depth and sediment type. Characteristic species of each depth zone are given.

ANNO

06/08/1987

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ACC 2386

TYPE P

YEAR 1967

AUTH BOCK, W.D.;

TITL A COMPARISON OF THE MONTHLY VARIATION IN FORAMINIFERAL BIOFACIES ON THALASSIA AND SEDIMENT, BIG PINE KEY AREA, FLORIDA.

BIBL PH.D. DISSERTATION. UNIVERSITY OF MIAMI. MIAMI, FL. 291 P.

KEYW MONROE

DISTRIBUTION

TEMPERATURE

SEAGRASS

FORAMINIFERA

SEDIMENT

SALINITY

SUBSTRATE

ABUNDANCE

GRAIN SIZE

ABST Eighty-one species of benthic foraminifera were found between Big Pine Key and Torch Keys in the lower Florida Keys. Foraminiferal distribution was related to substrate type, which was apparently determined by the distribution of *Thalassia testudinum*. Nine species dominated the grass beds and 11 species were dominant in or on the sediment. Species preferences for sediment type or grass are cited. Population variations appeared to be temperature related in 10 species. No correlations between population changes and temperature or salinity were discovered for the other species. Foraminiferal abundance and distribution were also regulated by interspecific and intraspecific competition.

ANNO

06/08/1987

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ACC 2387
TYPE P
YEAR 1968
AUTH BOCK, W.D.;
TITL TWO NEW SPECIES OF FORAMINIFERA FROM THE FLORIDA KEYS.

BIBL CONTRIB. CUSHMAN FOUND. FORAMINIFERAL RES. XIX(1):27-29.

KEYW MONROE FORAMINIFERA

ABST One new species belonging to a new genus, *Hemidiscalia palabunda*, and one new species, *Fissurina*, *F. pellucida* are described. Both species were from waters adjacent to Big Pine Key, Florida and both were found living on a substrate of *Thalassia testudinum* Konig.

ANNO

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ACC 4164
 TYPE P
 YEAR 1985
 AUTH BOESCH, D.F.;RABALAIS, N.N. (EDS.);
 TITL THE LONG-TERM EFFECTS OF OFFSHORE OIL AND GAS DEVELOPMENT: AN ASSESSMENT AND A RESEARCH STRATEGY.

BIBL REPORT PREPARED BY LOUISIANA UNIVERSITIES MARINE CONSORTIUM FOR NATIONAL MARINE POLLUTION PROG. OFC., NOAA, ROCKVILLE, MD.

KEYW OIL AND GAS	DEVELOPMENT	PHYSICAL
CHEMICAL	BIOLOGICAL	OCEANOGRAPHY
SEDIMENT	DRILLING MUD	DRILL CUTTING
HYDROCARBON	GEOLOGY	

ABST With the expansion of exploration for oil and gas in offshore regions of the United States during the 1970s, there was much concern regarding the environmental effects of future development. Legal and legislative actions have been taken to stop or slow development, in large part based on concerns that deleterious effects on the marine environment would result. Ambitious federal programs of studies of the potentially affected environment were implemented to address these concerns and ensure environmental protection. Despite these efforts, controversies regarding the seriousness of potential effects still exist, particularly with regard to subtle, but long-term effects. What exactly are the effects which might occur and what is the relative seriousness of each? In response to the need to answer these questions for the development of a considered and carefully planned strategy to address these concerns, COPRDM commissioned the effort resulting in this volume in late 1982 with funding provided by the National Science Foundation and the National Oceanic and Atmospheric Administration, Office of Marine Pollution Assessment (now Ocean Assessment Division) and National Marine Pollution Program Office. The ultimate purpose of this project has been to develop recommendations for the design of an environmental research and monitoring program to quantify and evaluate the significance of subtle and long-term effects of offshore oil and gas development activities. To accomplish this the participants decided that extensive background must be developed to support the conclusions and recommendations.

ANNO

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ACC 364
TYPE
YEAR 1968
AUTH BOGDANOV, D.W.;SOKOLOV, V.A.;KROMOV, N.S.;
TITL REGIONS OF HIGH BIOLOGICAL AND COMMERCIAL PRODUCTIVITY IN THE GULF OF MEXIC
O AND CARIBBEAN SEA.

BIBL OCEANOGRAPHY 8(3):371-381.

KEYW	BIOLOGY	FISHERY	HYDROLOGY
	PLANKTON	PRODUCTIVITY	HYDROGRAPHY
	CHEMISTRY	SEASONAL	

ABST Hydrological conditions, hydrochemical conditions, plankton distribution and commercial possibilities of common fishes in the Gulf of Mexico and Caribbean are discussed. High biological and commercial productivity are correlated with regions of upwelling and continental runoff. Regions associated with upwelling have high and constant productivity and commercial yield, while regions associated with continental runoff are characterized by seasonal and annual fluctuations of productivity and seasonal commercial yield.

ANNO

06/08/1987

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ACC 1044
TYPE
YEAR 1971
AUTH BOHANNON, B.J.;
TITL THE OCCURRENCE OF NITROGEN FIXATION IN ESCAMBIA BAY AND MULATTO BAYOU.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 65 PP.

KEYW DISSOLVED OXYGEN ELECTRICAL CONDUCTIV MICROFAUNA
 NITRATE SALINITY SECCHI DISC
 WATER TEMPERATURE NITROGEN

ABST Gas chromatographic determination of acetylene reduction was used to describe the occurrence of nitrogen fixation in Escambia Bay and Mulatto Bayou, Florida. Water and sediment samples were collected at 44 stations from October, 1970 to March, 1971 and analyzed for acetylene reduction and principal nitrogen fixing microbiota.

ANNO

06/08/1987

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ACC 4006
TYPE P
YEAR 1983
AUTH BOHNSACK, J.A.;
TITL RESILIENCY OF REEF FISH COMMUNITIES IN THE FLORIDA KEYS FOLLOWING A JANUARY
1977 HYPOTHERMAL FISH KILL.

BIBL ENVIRON. BIOL. FISH 7(1):41-53.

KEYW BIOLOGY	COMMUNITIES	ECOLOGY
FISHES	REEFS	REEF FISHES
RECRUITMENT	COASTAL	STRESS

ABST In January 1977, a record breaking cold spell caused fish kills at Big Pine Key, Florida. Census data collected before and after the cold spell from a series of model reefs constructed in 1975 showed significant drop in mean number of reef fish species and individuals. Following this disturbance, high recruitment of juveniles occurred, presumably due to reduced competition, predation, or a combination of these. Model and natural patch reef communities examined the summer following the cold spell (1977) were significantly different from those examined the summer before (1976) and the second summer following the cold spell (1978). During the summer of 1977, a significantly smaller mean fish size and a significantly greater mean number of species and individuals were observed. Increased species richness following the cold spell is consistent with the intermediate disturbance hypothesis. Contrary to some theoretical predictions, results suggest reef fish communities are highly resilient to some regional disturbances.

ANNO

06/08/1987

.....
ACC 2388
TYPE P
YEAR 1983
AUTH BOOKER, F.; FLYNN, B.; THORHAUG, A.; SHROEDER, P.;
TITL RED MANGROVE, RHIZOPHORA MANGLE, RESTORATION AT KEY LARGO: RESULTS AFTER SE
VENTEEN MONTHS.

BIBL FLA. SCI. 46(SUPPL. 1):16.

KEYW MONROE

COASTAL

FLORA

ABST Growth and survival of red mangrove, *Rhizophora mangle*, propagules and seed
lings planted on Key Largo, Florida, in July 1981 were measured over an are
a of approximately 27,712 sq. meters in January 1983. The restored mangrov
es, planted in mitigation for water pipeline construction in the Florida Ke
ys exhibited a survival rate ranging from 52-64%. Mean tree height was 43.3
+/-9.8 cm, mean number of primary branches was 2.4 +/- 5.5, and mean number
of leaf pairs was 10.4 +/- 14.2 (mean +/- std. dev.).

ANNO

06/08/1987

.....
ACC 267
TYPE
YEAR 1973
AUTH BOONE, P.A.;
TITL DEPOSITIONAL SYSTEMS OF THE ALABAMA, MISSISSIPPI AND WESTERN FLORIDA COASTAL ZONE.

BIBL TRANS., GULF COAST ASSOC. GEOL. SOC. 23:266-277.

KEYW BARRIER ISLAND COASTAL ZONE CONTINENTAL SHELF
 GEOLOGY SEDIMENT DISTRIBUTIO SEDIMENT
 MAFLA

ABST The northeastern Gulf of Mexico, from the Mississippi River to DeSoto Canyon, is a complex of interrelated dynamic depositional systems. Fluvial-deltaic, estuarine, barrier-island and marine-shelf systems characterize this part of the Gulf. The Pearl, Pascagoula, and Mobile fluvial-deltaic systems are major sources of sediment in the area. This complex is similar to that of the Texas coastal zone, but specific facies, geometry, and spatial relations differ. Recognition of these aspects of the Alabama, Mississippi, and western Florida coastal-zone depositional systems is an important consideration in planning and developing a petroleum exploration program.

ANNO

06/08/1987

.....
ACC 439

TYPE

YEAR 1971

AUTH BOOTHBY, R.N.; AVAULT, J.W.;

TITL FOOD HABITS, LENGTH-WEIGHT RELATIONSHIP, AND CONDITION FACTOR OF THE RED DRUM (SCIAENOPS OCELLATA) IN SOUTHEASTERN LOUISIANA.

BIBL TRANS. AM. FISH. SOC. 100(2):290-295.

KEYW BIOLOGY

FEEDING HABIT

COASTAL WATER

FISH

ECOLOGY

ABST

ANNO

06/08/1987

.....

ACC 440

TYPE

YEAR 1971

AUTH BORTONE, S.A.;

TITL STUDIES ON THE BIOLOGY OF THE SAND PERCH, DIPLECTRUM FORMOSUM (PERCIFORMES:
SERRANIDAE).

BIBL DEPARTMENT OF NATURAL RESOURCES, FL. TECHNICAL SERIES 65:1-27.

KEYW BIOLOGY

ECOLOGY

FISH

ABST

ANNO

.....
ACC 2065
TYPE U
YEAR 1977
AUTH BORTONE, S.A.;MAYER, G.F.;;SHIPP, R.L.;
TITL BLM MAFLA DEMERSAL FISH SURVEY, 1975-1976.

BIBL UNPUBL. REPT. U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND
MANAGEMENT. WASHINGTON, DC. 17 P. + 2 APPENDICES.

KEYW DEMERSAL FISH DIVERSITY BIOMASS
HYDROCARBON METAL DEPTH
TEMPERATURE SALINITY DO
SEDIMENT MAFLA

ABST This report presents the results of the demersal fish study of the Bureau of Land Management sponsored program in the Mississippi, Alabama, Florida (MAFLA) outer continental shelf. The authors summarize the results as follows: A total of 8,882 specimens representing 204 species were captured, identified, weighed, measured, and archived. These data were then analyzed for species diversity, seasonal variation of species composition and biomass, dominant species and possible migratory activity. In addition, tissue samples were removed from selected individuals for subsequent hydrocarbon/trace metal analysis. Species diversity appeared most consistent at 183 m stations. However, differences in absolute diversity between depths were inconclusive. Numbers of species and biomass appeared only slightly higher at shallower depths. There appeared to be little geographical variation in any of these parameters. Species dominance was the most consistent and valuable faunal characterization noted. Based on species dominance, faunal variation was more marked between depths than between geographically separate stations of the same depth.

ANNO

06/08/1987

.....
ACC 4007
TYPE P
YEAR 1977
AUTH BORTONE, S.A.; HASTINGS, P.A.; COLLARD, S.B.;
TITL THE PELAGIC-SARGASSUM ICHTHYOFAUNA OF THE EASTERN GULF OF MEXICO.

BIBL N.E. GULF SCI. 1(2):60-67.

KEYW BIOLOGY ECOLOGY FISH
 COMMUNITY NEUSTON PELAGIC FISH

ABST A total of 2,857 fishes comprising 15 families and 40 species was collected at 62 localities in the eastern Gulf of Mexico between 1971 and 1976. The fauna was dominated by the Carangidae, Balistidae, and Syngnathidae. *Mona canthus hispidus* was the most abundant species and comprised 84.5% of the total fauna. Species diversity (H') was variable within the Gulf and low in comparison with the western Atlantic Sargassum--associated ichthyofauna. "Index of Affinity" was high within the Gulf due to the abundance of *M. hispidus*. Perhaps conditions associated with community dispersal, for which *M. hispidus* is better adapted, permit this species to dominate this community. Additionally, species diversity differences may be due to substrate areas of "clumpsize."

ANNO

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ACC 4165
 TYPE P
 YEAR 1986
 AUTH BOTHNER, M.H.; ET AL.;
 TITL ANALYSIS OF TRACE METALS IN BOTTOM SEDIMENTS IN SUPPORT OF DEEPWATER BIOLOGICAL PROCESSES STUDIES ON THE U.S. MID-ATLANTIC CONTINENTAL SLOPE AND RISE.

BIBL A 2ND INTERIM REPT. PREPARED BY U.S. GEOLOGICAL SURVEY (INTERAGENCY AGREEMENT #14-12-0001-03197) FOR MINERALS MANAGEMENT SERVICE, VIENNA, VIRGINIA.

KEYW OIL	DRILLING MUD	TRACE METAL
BARIUM	DRILL CUTTING	SEDIMENT
GRAIN SIZE		

ABST Sediment samples collected during the first four cruises to the continental slope and rise off the Mid-Atlantic states have been analyzed for 12 metals (Al, Ba, Cd, Cr, Cu, Fe, Hg, Mn, Ni, Pb, B, and Zn). Because of its high concentration in drilling mud, Ba is most commonly measured to trace drilling mud in the marine environment. In this study only small changes in Ba concentrations in sediments have been noted to date. In one core collected on Cruise 3 from Station 1 adjacent to the drilling in Block 372, the concentration of Ba was 13 percent higher in the surface sediment than deeper sediment. This enrichment is probably not harmful to benthic organisms. Other samples from Cruise 3, Station 1 do not show the same increase indicating a patchy distribution of drilling-related Ba. At Stations 13 and 14, near the site of drilling in Block 93, there is no significant change in the average concentration of Ba in surface sediment over the first four cruises. There was no evidence of accumulating drill cuttings in the grain size of sediment cores were analyzed. The strongest signal from drilling mud was observed in sediment trap samples placed within the upper 850 m of the water column on a subsurface mooring 1.8 km south-southwest of the drilling rig in Block 372. Discrete particles of barite were observed in preliminary analyses by means of a scanning electron microscope. These samples should yield additional information about the dispersal and fall velocity of drilling mud in sea water.

ANNO

06/08/1987

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ACC 569

TYPE

YEAR 1968

AUTH BOUMA, A.H.;BRYANT, W.R.;DAVIES, D.K.;TIEH, T.T.;

TITL STUDY OF THE CONTINENTAL SHELF OF THE GULF OF MEXICO.

REPORT TO THE U.S. GEOLOGICAL SURVEY.

BIBL TEXAS A&M UNIVERSITY, DEPARTMENT OF OCEANOGRAPHY, COLLEGE STATION, TX. PROJ
ECT 506, REFERENCE 68-2T. 139 PP.

KEYW GEOCHEMISTRY

GEOLOGIC HISTORY

GEOLOGY

MINERALOGY

CONNTINENTAL SHELF

SEDIMENT

STRATIGRAPHY

STRUCTURE

ABST

ANNO

06/08/1987

.....
ACC 583
TYPE
YEAR 1970
AUTH BRAUNSTEIN, J. ED.;
TITL BIBLIOGRAPHY OF GULF COAST GEOLOGY, SPECIAL PUBLICATION 1.

BIBL GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES, NEW ORLEANS, LA. 2 VOLS. 1
045 PP.

KEYW BIBLIOGRAPHY COASTAL WATER GEOLOGY

ABST

ANNO

06/08/1987

.....
ACC 4218
TYPE P
YEAR 1978
AUTH BRAVO, H.A.;SALAZAR, S.L.;BOTELLO, A.V.;MANDELLI, E.F.;
TITL POLYAROMATIC HYDROCARBONS IN OYSTER FROM COASTAL LAGOONS ALONG THE EASTERN
COAST OF THE GULF OF MEXICO, MEXICO.

BIBL BULL. ENVIRON. CONTAM. & TOXICOL. 19(2):171-176.

KEYW HYDROCARBON OIL SPILL MOLLUSK
POLLUTION

ABST Polynuclear aromatic hydrocarbons (PAHs) appear to be widely distributed in the sea, as well as in river water and soil. The presence of these compounds in aquatic organisms has been mainly attributed to oil spills, but biosynthesis, aerial transport, and terrestrial contributions are also important sources. The assessment of PAHs levels in marine bivalve mollusks has attracted great interest, since they are useful in determining the status of coastal areas with regard to petroleum contamination. The total concentrations of the PAHs in the analyzed samples are surprisingly high for oyster tissues. No single causative factor will adequately explain environmental data of this kind because the possibility of accidental spillages and intermittent activities that may contribute to the distortion of these results and provide a basis for further investigation.

ANNO

06/08/1987

.....
ACC 805
TYPE
YEAR 1975
AUTH BREHM, W.T.;
TITL DISTRIBUTION PATTERNS IN DIOPATRA CUPREA.

BIBL MASTER'S THESIS. UNIVERSITY OF ALABAMA, TUSCALOOSA, AL. 50 PP.

KEYW BENTHIC FAUNA SALINITY SEDIMENT TEXTURE
 WATER TEMPERATURE POLYCHAETE DISTRIBUTION

ABST The distribution patterns of *Diopatra cuprea*, a polychaete worm, were described from samplings in Mobile Bay, Mississippi Sound and the Gulf of Mexico near Dauphin Island, Alabama. Samples were collected between January, 1971 and February, 1975.

ANNO

06/08/1987

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ACC 831
TYPE
YEAR N/AN
AUTH BRENT
TITL PROPOSED OFFSHORE OIL SITE MONITORING.

BIBL UNIVERSITY OF SOUTHERN MISSISSIPPI, HATTIESBURG, MS.

KEYW BOD CARBON INORGANIC COMPOUND ORGANIC CARBON

ABST Areas of the continental shelf off the Louisiana coast were sampled quarterly over a period beginning in 1972 and ending in 1974. Organic carbon, inorganic carbon and biochemical oxygen demand were measured at each station. Water samples were taken from within the water column.

ANNO

06/08/1987

.....
ACC 4227
TYPE P
YEAR 1956
AUTH BRETSCHNEIDER, C.L.;
TITL WAVE FORECASTING RELATIONSHIPS FOR THE GULF OF MEXICO.

BIBL CORPS OF ENG., BEACH EROSION BOARD TECH. MEM. 84: 27 PP.

KEYW WIND WAVE DEPTH
 WAVEHEIGHT WIND STRESS

ABST The development and application of a method for computing wind wave data over the continental shelf along the United States coast of the Gulf of Mexico is described. A set of generalized forecasting curves is required for each location and each direction to bring the waves in over the shallow sloping bottom to the desired depth. Using deep-water forecasting relationships and taking bottom fraction into account, a generalized set of dimensionless forecasting relationships is prepared for each of five locations for which statistical deep-water wave data are compiled. The forecasting curves are intended for the most frequent minimum fetch and corresponding wind speed for various deep-water wave height ranges and average bottom conditions of various directions. For the cases of wind parallel to the coast or from land and to sea the curves are applicable to all water depths. However, for the case of winds blowing from sea toward land, the forecasting relationships are satisfactory only for depths of about 20 feet or greater, although the technique has been stretched to a depth of 12 feet for cases where winds are not too high. At depths of about 20 feet or less the bottom slope changes too rapidly for the theory to apply, and longer period swell will be breaking in the surf zone, thereby obscuring the wind wave pattern.

ANNO

06/08/1987

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ACC 893
TYPE
YEAR N/AG
AUTH BRIGHT, T.;
TITL SURVEY OF DEEP SEA BOTTOM FISHES, GULF OF MEXICO.

BIBL TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 218 P.

KEYW DEPTH DEMERSAL FISH

ABST Deep sea bottom fish obtained through dredging in the Gulf of Mexico are reported. Data available include the identified specimens, location, depth, numbers caught, and morphometric measurements. Data were collected from June, 1964 to June, 1969.

ANNO

06/08/1987

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ACC 2066

TYPE P

YEAR 1981

AUTH BRIGHT, T.J.;JAAP, W.C.;CASHMAN, C.W.;

TITL ECOLOGY AND MANAGEMENT OF CORAL REEFS AND ORGANIC BANKS. IN: PROC. OF A SY
MP. ON ENVIRON. RESEARCH NEEDS IN THE GULF OF MEXICO, KEY BISCAYNE (FLORIDA
) , 30 SEPT.-5 OCT. 1979. D.K. ATWOOD (CONVENER).

BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LABORATORIES, MIAMI, FL
VOL IIB, P. 53-160.

KEYW ECOLOGY
STRESS

CORAL
MANAGEMENT

REEF

ABST This summary paper provides a detailed description of the Gulf of Mexico reefs and hard bottom patches, reviews existing studies, describes their economic value, details the stresses affecting them, and lists the governmental agencies having jurisdiction over them. A list of recommendations for future studies is also presented. An extensive reference list is also provided.

ANNO

06/08/1987

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ACC 4249

TYPE P

YEAR 1981

AUTH BRIGHT, T.J.

TITL BIOTIC COMMUNITIES OF HARD-BANKS IN THE NORTHWESTERN GULF OF MEXICO. 6. BIE
NNIAL INTERNATIONAL ESTUARINE RESEARCH CONFERENCE GLENEDEN BEACH, OR (USA)
1-5 NOV. 1981.

BIBL ESTUARIES 4(3):304.

KEYW CORAL

REEF

COMMUNITY

DEPTH

CORALLINE

ALGAE

ALGAL NODULE

ABST Seven biotic zones occur on 33 hard-banks on the outer continental shelf, n
orthwestern Gulf of Mexico. High diversity coral reefs (20 to 35 m depth)
occur on two banks (East and West Flower Gardens), with 18 species of herma
typic corals covering 50 to 60% of the hard bottom. *Montastrea annularis* ϕ
ominates, growing at 7 to 8 mm per yr. Low diversity coral reefs dominated
by *Stephanocoenia michelini* (growth rate approx. 6 mm per yr) occupy 4 ban
ks between 35 and 52 m depth. The largest reef-building community is domin
ated by crustose coralline algae which form nodules and encrusting hard sub
stration on 13 banks between 46 and 97 m depth. Turbid water envelops the
lowermost portions of all banks studied, in some cases limiting the depth t
o which coralline algae populations predominate.

ANNO

06/08/1987

.....
ACC 896
TYPE
YEAR 1958
AUTH BROADHEAD, G.C.;
TITL GROWTH OF THE BLACK MULLET (MUGIL CEPHALUS) IN WEST AND NORTHWEST FLORIDA.

BIBL FLORIDA DEPARTMENT OF NATURAL RESOURCES, TECH. SERIES NO. 25. 31 PP.

KEYW MULLET PELAGIC FISH GROWTH
TAGGING

ABST The growth of the black mullet was studied from 1951 to 1954. Analyses of commercial catches and data from tagging studies gave growth rate information. Principal study areas were Pensacola, Apalachicola, Cedar Key, and Homosassa.

ANNO

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ACC 234
TYPE
YEAR 1973
AUTH BROOKS, H.K.;
TITL GEOLOGICAL OCEANOGRAPHY.

IN: J.I. JONES, R.E. RING, M.O. RINKEL, AND R.E. SMITH, EDS. A
SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBU
RG, FL. P. 491-500.

KEYW GEOLOGIC HISTORY GEOLOGY OCEANOGRAPHY
CONTINENTAL SHELF

ABST The Gulf of Mexico is a Mediterranean-type sea. In the eastern Gulf, the clastic province of the Gulf Coast and the carbonate Florida platform have encroached on this oceanic basin, especially during the Cretaceous and early Tertiary. The Mississippi River and its sedimentary province have contributed no clastic sediments to the present Alabama-Mississippi shelf and slope and are not contributing to the Mississippi Fan at this time. Drastic geographic, environmental, and biological changes have occurred in the Gulf during the last 15 to 20 million years, but these are related to changes in world climate, sea-level lowering, and fluctuations. Except for the Greater Antilles, there has been no orogenic activity in the lands bordering the eastern Gulf of Mexico since the Paleozoic. Hypotheses suggesting rifting or foundering of land masses are not substantiated. Evidence proves that this is presently one of the most stable areas of the earth. A thin veneer of sediments, mostly relic, covers the continental shelf. The estuaries and lagoons are sediment traps and are silting rapidly. Little or no sediment from the land is being contributed to beach nourishment. Through erosion and deposition the existing coastal features are continually being modified to new environmental states.

ANNO

06/08/1987

.....
ACC 2067

TYPE P

YEAR 1981

AUTH BROOKS, J.M. ;

TITL SOURCES AND DISTRIBUTIONS OF PETROLEUM HYDROCARBONS IN THE GULF OF MEXICO:
SUMMARY OF EXISTING KNOWLEDGE. IN: PROC. OF A SYMP. ON ENVIRON. RESEARCH
NEEDS IN THE GULF OF MEXICO, KEY BISCAYNE, FL. 30 SEPT.-5 OCT. 1979.
D.K. ATWOOD (CONVENER).

BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LABORATORY, MIAMI, FL.
VOL. IIC:167-209.

KEYW DISTRIBUTION HYDROCARBON PETROLEUM
BIOTA SEDIMENT

ABST This summary paper reviews the state of knowledge on inputs of petroleum hydrocarbons and their distribution in biota and sediments of the Gulf of Mexico. Major multidisciplinary programs involving petroleum hydrocarbons of the Gulf of Mexico are also reviewed. Information needs are identified and future directions are recommended.

ANNO

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ACC 2501
TYPE P
YEAR 1975
AUTH BROOK, I.M.;
TITL SOME ASPECTS OF THE TROPHIC RELATIONSHIPS AMONG THE HIGHER CONSUMERS IN A S
EAGRASS COMMUNITY (THALASSIA TESTUDINUM KOENIG) IN CARD SOUND, FLORIDA.

BIBL PH.D. DISSERTATION. UNIVERSITY OF MIAMI, MIAMI, FL. 133 P.

KEYW DADE	SEAGRASS	BENTHIC
POLYCHAETE	CRUSTACEAN	MOLLUSC
FISH	PRIMARY PRODUCTIVITY	

ABST This study examined the feeding relationships (higher level consumers) of the macrobenthic and cryptic fauna of Card Sound. The area studied had a low biomass of benthic and cryptic fauna (3.35 g dry/sq. meter). The principal interaction between the primary consumers was via the polychaetes and peracaridean crustaceans. Based on digestive tract examinations, molluscs were not found to be a preferred food for those animals frequenting the study site. The majority of the fishes captured were determined to be foragers over a wide area. It was felt that the predator population was limited by the small stock of polychaetes and peracaridean crustaceans (1.97 g dry/sq. m). The primary productivity of *Thalassia* in the area was high (3.7 g dry/sq. m/day), but little evidence of grazing or utilization of detritus by higher consumers was found.

ANNO

06/08/1987

.....
ACC 2502

TYPE P

YEAR 1977

AUTH BROOK, I.M.;

TITL TROPHIC RELATIONSHIPS IN A SEAGRASS COMMUNITY (THALASSIA TESTUDINUM) IN CARD SOUND, FLORIDA. FISH DIETS IN RELATION TO MACROBENTHIC AND CRYPTIC FAUNAL ABUNDANCE.

BIBL TRANS. AM. FISH. SOC. 106(3):201-294.

KEYW DADE

CRUSTACEAN

BIOMASS

CURRENTS

FISH

MOLLUSC

TEMPERATURE

TIDE

POLYCHAETE

BENTHIC

SALINITY

ABST The trophic interaction between the fishes and the macrobenthic and cryptic fauna in Card Sound was studied. Based on the digestive tract analysis, the principal interaction between the primary consumers of the study area and the higher trophic level predators was found to be via the polychaetes and peracaridean crustaceans. Molluscs which constituted a significant portion of the benthic biomass were not found to be a preferred food. It was suggested that the predator population was probably limited by the small stock of polychaetes and peracaridean crustaceans. The majority of the fishes captured were determined to be foragers over a wide area.

ANNO

.....
ACC 4008
TYPE P
YEAR 1975
AUTH BROOKS, J.M.; SACKETT, W.M.;
TITL SOURCES, SINKS, AND CONCENTRATIONS OF LIGHT HYDROCARBONS IN THE GULF OF MEX
ICO.

BIBL J. GEOPHYS. RES. 78(24):5248-5258.

KEYW HYDROCARBON PETROLEUM CHEMISTRY
 WATER COLUMN COASTAL WATER

ABST A survey of the concentrations of light hydrocarbons in the Gulf of Mexico has been made aboard the R.V. Alaminos of Texas A&M University. The hydrocarbon analyzer consists of a modified Beckman process gas chromatograph with a flame ionization detector. For surface profiling, gases are "stripped" from seawater taken 3 meters below the sea surface by vacuum extraction with a 12-stage booster pump. These gases are injected periodically into the gas stream of the chromatograph for analysis. The system also has the capability of analyzing discrete seawater samples either by the method of McAuliffe or by the method of Swinnerton and his co-workers. Coastal waters of the Gulf of Mexico are not in equilibrium with the atmosphere insofar as low molecular weight hydrocarbons are concerned, even though methane in most of the open Gulf of Mexico is in fairly close equilibrium with the atmosphere. The coastal waters of the Gulf act both as a source and as a sink for atmospheric methane. The important man-derived sources of methane in the Gulf are ports with their associated shipping and industrial activity, offshore petroleum drilling and production operations, and open ocean shipping activity. High light hydrocarbon concentrations have been found in the vicinity of a tanker discharging "clean ballast water." The important natural sources include seepage from oil and gas reservoirs and anaerobic production of methane. The main sink for atmospheric methane in the Gulf of Mexico is in the Yucatan area, where there is major upwelling of deep water with low hydrocarbon concentrations.

ANNO

06/08/1987

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ACC 4187

TYPE P

YEAR 1981

AUTH BROOKS, J.M.; WIESENBERG, D.A.; BURKE, R.A., JR.; KENNICUTT, M.C.;

TITL GASEOUS AND VOLATILE HYDROCARBON INPUTS FROM A SUBSURFACE OIL SPILL IN THE
GULF OF MEXICO.

BIBL ENVIRON. SCI. TECHNOL. 15(8):951-959.

KEYW HYDROCARBON

OIL SPILL

POLLUTION

ABST

ANNO

06/08/1987

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ACC 4212

TYPE P

YEAR 1978

AUTH BROOKS, J.M.; BERNARD, B.B.; SAUER, T.C., JR.; ABEL-REHEIM, H.;

TITL ENVIRONMENTAL ASPECTS OF A WELL BLOWOUT IN THE GULF OF MEXICO.

BIBL ENVIRON. SCI. TECH. 12(6):695-703.

KEYW SUSPENDED
TEMPERATURE
POLLUTION

SEDIMENT
SALINITY

HYDROCARBON
DISSOLVED OXYGEN

ABST Studies were conducted around a well blowout site on the Texas Continental shelf that resulted in the escape of large quantities of gas and creation of a crater 95 m deep and 500 m. wide. Four months after the blowout a plume of suspended sediment and gas continued to exude from the crater at a seep rate of $10 \times 10,000,000$ L/day. At this time molecular and isotopic analyses of the seeping gas indicated that the gas was principally of biogenic origin (predominantly methane and $\delta^{13}C$ of -60 o/oo) and not accompanied by any brine seepage. The seep gas did, however, contain a small thermocatalytic component as evidenced by the $C1/(C2+C3)$ ratio and its liquid hydrocarbon content (1.23 mg/L). Measurements of gaseous and liquid hydrocarbons dissolved in the water in the vicinity of the seep indicated rapid dilution of the high concentrations observed over the plume. The depth to which sediments were redeposited around the crater was determined by carbon isotope measurements on the carbonate fraction of the sediment. Analysis of hydrocarbons in redeposited sediments indicated that the original blowout gas was of predominantly thermocatalytic origin, containing higher concentrations of $C2-C14$ hydrocarbons than are presently seeping from the blowout. The impact of the blowout on temperature, salinity, dissolved oxygen, DOC, POC, TSM, helium, CO_2 , ΣCO_2 , and sulfate in the waters and sediment near the crater is also discussed.

ANNO

06/08/1987

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ACC 4219

TYPE P

YEAR 1977

AUTH BROOKS, J.M.;BERNARD, B.B.;SACKETT, W.M.;

TITL INPUT OF LOW-MOLECULAR WEIGHT HYDROCARBONS FROM PETROLEUM OPERATIONS INTO THE GULF OF MEXICO.

BIBL IN: FATE AND EFFECTS OF PETROLEUM HYDROCARBONS IN MARINE ORGANISMS AND ECOSYSTEMS. D.A.WOLFE (ED.) PERGAMON PRESS. 373-384.

KEYW HYDROCARBON POLLUTION DRILLING
OIL OFFSHORE PLATFORM

ABST Dissolved C1 to C14 hydrocarbon patterns measured during the last 6 years in the Gulf of Mexico indicate that underwater venting of waste gases and brine discharges, both associated with offshore platforms, are the major sources of non-methane light hydrocarbons to upper Gulf coastal waters. These sources are apparently responsible for the two orders of magnitude increase in Louisiana Shelf waters over open ocean levels of the light hydrocarbons. Analyses of the hydrocarbons composition of vented gases and brines and estimates of their annual discharge rates indicate that up to 450 metric tons of C5 to C10 hydrocarbons are being added to Louisiana Shelf waters each year.

ANNO

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ACC 4268

TYPE P

YEAR 1977

AUTH BROOKS, J.M.; BERNARD, B.B.; SACKETT, W.M.;

TITL INPUTS OF LOW-MOLECULAR-WEIGHT HYDROCARBONS FROM PETROLEUM OPERATIONS INTO
THE GULF OF MEXICO.

BIBL IN: FATE AND EFFECTS OF PETROLEUM HYDROCARBONS IN MARINE ECOSYSTEMS AND ORG
ANISMS. PROC. SYMP. AT THE OLYMPIC HOTEL, SEATTLE, WA. PERGAMON PRESS, NY.

KEYW HYDROCARBON

PETROLEUM

POLLUTION

DRILLING

OIL

OFFSHORE PLATFORM

ABST Dissolved C(SUB-1) to C(SUB-4) hydrocarbon patterns measured during the las
t 6 years in the Gulf of Mexico indicate that underwater venting of waste g
ases and brine discharges, both associated with offshore platforms, are the
major sources of non-methane light hydrocarbons to upper Gulf coastal water
s. These sources are apparently responsible for the two orders of magnitud
e increase in Louisiana Shelf waters over open levels of the light hydrocar
bons with average concentrations of 3100, 31, and 22 nanoliters per liter o
f methane, ethane, and propane, respectively. Analyses of the hydrocarbon
composition of vented gases and brines and estimates of their annual discha
rge rates indicate that up to 45 metric tons of C(SUB-5) to C(SUB-10) hydro
carbons are being added to Louisiana Shelf waters each year. Although the
C(SUB-1) to C(SUB-4) hydrocarbons per se are apparently not toxic to marine
organisms, they nevertheless are proving to be highly sensitive indicators
of the more toxic components of petroleum which are being introduced to th
e sea by man's activities.

ANNO

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ACC 4270
TYPE (
YEAR 1981
AUTH BROOKS, J.M.; ET AL.;
TITL SURFICIAL SEDIMENTS AND SUSPENDED PARTICULATE MATTER. THE BUCCANEER GAS AND OIL FIELD STUDY.

BIBL SYMP. BUCCANEER GAS AND OIL FIELD STUDY, HOUSTON, TX. PLENUM PUBLISHING COMPANY, NEW YORK. 69-116 P.

KEYW	SEDIMENT	SUSPENDED	WATER COLUMN
	POLLUTANT	HYDROGRAPHIC	TURBIDITY

ABST This paper reports on surficial sediment and suspended particulate studies undertaken at Buccaneer Field off Galveston between 1978 and 1980. Water column and surficial sediment samples were collected for study as specified. Profiles obtained by transmissometry were typical of the Gulf shelf area, the quantity and composition of the suspended particulates showing large spatial and temporal variations. The composition of suspended particulates varied considerably over the sampling periods. Data indicated that the water column was stratified during all samplings except winter, due to strong turbulent activity. The Buccaneer production platforms did not measurably alter the bulk composition of suspended particulates because of the small volumes displaced by the platforms. Pollutants introduced into the water column were rapidly transported out of the system either by hydrographic conditions or perhaps by attachment to suspended particulates.

ANNO

06/08/1987

.....
ACC 4308
TYPE P
YEAR 1977
AUTH BROOKS, J.M.;
TITL THE FLUX OF LIGHT HYDROCARBONS INTO THE GULF OF MEXICO VIA RUNOFF.

BIBL MAR. POLLUTANT TRANSFER, CHAP. 8: 185-200.

KEYW HYDROCARBON SUSPENDED WATER COLUMN
COASTAL WATER

ABST Light hydrocarbons in rivers originate from both natural and man-derived sources. The light hydrocarbons discharged into the Gulf of Mexico by rivers have significant impact on the coastal waters. Hydrocarbon anomalies are seen typically from 10 to 30 miles off port and estuaries and as much as 50 miles off the Mississippi River. The light hydrocarbons introduced into the surface layer of the ocean are rapidly lost to the atmosphere. The residence time of methane and other gaseous hydrocarbons in the mixed layer of the ocean is on the order of days. Rivers also have an influence on the light hydrocarbon concentrations in coastal waters because of the suspended material they carry. Some of the organic matter in the suspended material appears to be reduced slowly to methane possibly in micro-reducing environments. This methane formation seems to occur in situ in the water column forming a maximum at some depth in the upper hundred meters in the Mississippi Delta region. As the water in the delta region spreads across the shelf, the methane maximum in the water column may increase as the water moves away from the delta. The extent of methane formation in the methane maximum and the fate of the maximum in the Gulf of Mexico are poorly understood.

ANNO

06/08/1987

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ACC 4319
TYPE P
YEAR 1975
AUTH BROOKS, I.H.;
TITL THE FLORIDA CURRENT AT KEY WEST: SUMMER 1972.

BIBL J. MAR. RES. 33(1):833-92.

KEYW CURRENTS

TEMPERATURE

SALINITY

ABST

ANNO

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ACC 4328
TYPE P
YEAR 1979
AUTH BROOKS, D.A. ;
TITL LONG WAVE COUPLING OF THE MID AND SOUTH ATLANTIC BIGHTS FORCED BY THE ATMOSPHERE.

BIBL UNKNOWN. 131 PP.

KEYW TIDE WVE WIND STRESS
CONTINENTAL SHELF WIND PRESSURE

ABST The eastern United States continental margin profile is relatively uniform throughout the Middle Atlantic Bight (Hatteras to Gulf of Maine), but in the South Atlantic Bight (Florida Keys to Hatteras) it bifurcates into an inner and outer slope region. Coastal tide gage records indicate that sea level oscillations with periods longer than one week can propagate southward across continental shelf waves in both Bights, thereby providing a coupling mechanism between the Bights. However, several day period motions appear to be confined to the South Atlantic Bight and may result from backscattering of long wave energy by the variable topography and the Gulf Stream. The coastal sea level phase data for the several day period motions is not easily attributable to a monochromatic propagating wave; rather, it appears that wave group properties may lead to a more consistent explanation of the phases. Cross-shelf and longshelf wind stress components were both strongly coupled to sea level fluctuations for long periods: short period motions were more closely associated with dynamic responses to atmospheric pressure fluctuations.

ANNO

06/08/1987

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ACC 1021

TYPE

YEAR 1980

AUTH BROWN, G.L.;GURSKY, R.;HITLIN, R.A.;HEMPSTEAD, J.D.;HANCUFF, P.;

TITL A SURVEY OF RECREATIONAL SHRIMPERS IN THE BAY AND SOUND SYSTEMS OF THE GULF
COAST.

BIBL GULF STATES MARINE FISHERIES COMMISSION, GULF COAST RESEARCH LABORATORY, OC
EAN SPRINGS, MS. 176 PP.

KEYW COASTAL WATER

FISHERY

RECREATION

SHRIMP

SOCIOECONOMIC

STATISTICS

SURVEY

ABST A total of 3,866 interviews were conducted in the survey of recreational sh
rimpers along the Gulf Coast. In Phase I, which covered the brown shrimp se
ason, 925 interviews were conducted. In Phase II, which covered the white s
hrimp season, 2,941 interviews were conducted. These data were collected an
d analyzed to describe the effort and catch of recreational shrimpers. Vari
ous tables have been developed to present frequencies, means, and/or standa
rd deviations on many variables. The major variables of interest include po
unds of shrimp per shrimping trip by species, pounds of shrimp per hour by
species, and count per pound of shrimp by species for each state. In some c
ases, large sample sizes have allowed breakdowns of these data beyond the s
tate level. For example, appendices provide catch data by site of intercept
, by date of interview, and by location of catch for the state of Louisiana
in Phase II of the survey.

ANNO

06/08/1987

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ACC 2320
TYPE P
YEAR 1983
AUTH BROWN, R.;PIERCE, R.;MURPHY, S.;
TITL CHARACTERIZATION OF HYDROCARBONS IN SEDIMENT AND ORGANISMS FROM CHARLOTTE H
ARBOR ESTUARY.

BIBL FLA. SIC. 46(SUPPL. 1):47.

KEYW CHARLOTTE	HYDROCARBON	SEDIMENT
SHRIMP	CRAB	SEA TROUT
SEAGRASS	MULLET	OYSTER
POLLUTION		

ABST Sediments and tissues of marine organisms (oyster, shrimp, crab, mullet, and sea trout) from Charlotte Harbor, Florida were analyzed for hydrocarbon concentrations and composition. Most of the sampling sites were found to be relatively free from petroleum contamination. However, certain sites, such as commercial docks, marinas, and residential development canals exhibited evidence of petrochemical input.

ANNO

06/08/1987

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ACC 2320
TYPE P
YEAR 1983
AUTH BROWN, R.;PIERCE, R.;MURPHY, S.;
TITL CHARACTERIZATION OF HYDROCARBONS IN SEDIMENT AND ORGANISMS FROM CHARLOTTE H
ARBOR ESTUARY.

BIBL FLA. SIC. 46(SUPPL. 1):47.

KEYW CHARLOTTE	HYDROCARBON	SEDIMENT
SHRIMP	CRAB	SEA TROUT
SEAGRASS	MULLET	OYSTER
POLLUTION		

ABST Sediments and tissues of marine organisms (oyster, shrimp, crab, mullet, and sea trout) from Charlotte Harbor, Florida were analyzed for hydrocarbon concentrations and composition. Most of the sampling sites were found to be relatively free from petroleum contamination. However, certain sites, such as commercial docks, marinas, and residential development canals exhibited evidence of petrochemical input.

ANNO

06/08/1987

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ACC 4009

TYPE P

YEAR 1985

AUTH BROWDER, J.A.;

TITL RELATIONSHIP BETWEEN PINK SHRIMP PRODUCTION ON THE TORTUGAS GROUNDS AND WATER FLOW PATTERNS IN THE FLORIDA EVERGLADES.

BIBL BULL. MAR. SCI. 37(3):839-856.

KEYW BIOLOGY

LANDINGS (POUNDS)

INVERTEBRATE

COMMERCIAL FISHERY

PINK SHRIMP

BENTHIC

HYDROLOGY

COASTAL

ABST Regression analysis indicated a relationship between landings of pink shrimp on the Tortugas grounds and freshwater runoff to the estuarine areas of Everglades National Park, as indexed by water levels in the park. A strong positive relationship between quarterly (3-month) landings and the average water level of the previous quarter was found for three quarters of the year. October through December water levels, followed by July through September water levels, may have had the greatest influence on annual landings. An inverse relationship between landings and water levels from April through June was not precluded. Information of this type is needed in order that the freshwater needs of estuarine-dependent marine organisms can be taken into account in water management planning.

ANNO

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ACC 4010
 TYPE P
 YEAR 1979
 AUTH BRUNNER, C.A.;
 TITL DISTRIBUTION OF PLANKTONIC FORAMINIFERA IN SURFACE SEDIMENTS OF THE GULF OF MEXICO.

BIBL MICROPALEONTOLOGY 25(3):325-335.

KEYW FORAMINIFERA	SEDIMENT	BIOGEOGRAPHY
ASSEMBLAGE	BIOLOGY	DISTRIBUTION
LOOP CURRENT	SALINITY	TEMPERATURE

ABST Frequency distribution of planktonic foraminifera from 140 trigger core-tops in the Gulf of Mexico generally reflect major oceanographic features. The distribution of *Globigerinoides sacculifer* outlines the Loop Current in the eastern Gulf and *Globigerinoides ruber maxima* marks salinity extremes, whereas the distributions of *Pulleniatina obliquiloculata*, *Globorotalia truncatulinoides* and *Globigerinita glutinata* parallel winter isotherms in the Gulf. Q-mode factor analysis was used to extract 5 assemblages from 23 species and compare their distributions in the Gulf to those of the well-studied Atlantic Ocean. The 5 assemblages are interpreted as: 1) subtropical, dominated by *G. ruber*; 2) temperate, composed of *Globorotalia inflata*, *Globigerina falconensis*, *Globorotalia truncatulinoides*, *Globigerina bulloides* and *Neoglobogadrina dutertrei*; 3) dissolution-resistant, consisting of *Globorotalia menardii*, *Pulleniatina obliquiloculata* and *N. dutertrei*; 4) equatorial, composed of *G. sacculifer* and *P. obliquiloculata*; and 5) subpolar, consisting of *N. dutertrei*, *G. inflata*, *Neoglobogadrina pachyderma* and *G. bulloides*. The modern distributions of these assemblages have been used to develop 4 transfer functions from which the winter and summer temperatures and salinities for the Late Quaternary have been estimated.

ANNO

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ACC 4011

TYPE P

YEAR 1969

AUTH BRYANT, W.R.; MEYERHOFF, A.A.; BROWN, N.K., JR. ET AL.;

TITL ESCARPMENTS, REEF TRENDS, AND DIAPYRIC STRUCTURES, EASTERN GULF OF MEXICO.

BIBL AM. ASSOC. PETROL. GEOL. BULL. 53(12):2506-2542.

KEYW CARBONATE
GEOPHYSICAL

GEOLOGY
REEF

SEISMIC
PETROLEUM

ABST Dredging, coring, and order profiling of the Florida escarpment southward from 28 degrees 1.5'N, 86 degrees 24'W, to the Florida Strait, of Jordan Knoll (23 degrees 20'N, 83 degrees 45'W) in the Florida Strait, and of the Campeche escarpment northeast of Yucatan (23 degrees 39'-23 degrees 45'N, 85 degrees 22'-85 degrees 26'W) have revealed the presence in all three areas of Aptian-Albian reef and forereef which lithologically and paleontologically are nearly identical to the Glen Rose-Stuart City reefs of the U.S. Gulf Coast and the El Abra-Golden Lane reefs of eastern Mexico. The late Aptian-Albian reefs--or banks--apparently were not continuous from the Florida escarpment to the Campeche escarpment, but were separated by a deepsea channel which crossed Pinar del Rio Province, western Cuba. Jordan Knoll may have been an Early Cretaceous atoll, isolated from the reefs of Florida escarpment and similar to the Golden Lane atoll of eastern Mexico. A core from Jordan Knoll penetrated a late Pliocene carbonate mud containing abundant angular limestone clasts up to 2.1 cm in diameter. The clasts range in age from late Aptian-Albian through middle Miocene to early Pliocene. The source of the clasts is unknown but regional geologic data eliminate a southern source; the clasts most probably were derived from Jordan Knoll itself. The lithology and paleontology of the clasts show that the Jordan Knoll region was a shallow water bank until latest Albian or early Cenomanian time; that at the present Florida Strait area deepened steadily from Cenomanian through Santonian times; and that, from Santonian time until the present, bathyal

ANNO

06/08/1987

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ACC 1093
TYPE
YEAR 1971
AUTH BUCK, S.W.;
TITL CHITINOCLASTIC BACTERIA IN COPEPODS.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 80 PP.

KEYW BACTERIA

MICROFAUNA

ZOOPLANKTON

ABST Water and zooplankton samples were collected off the northeast coast of Santa Rosa Island, Florida between June and August, 1970. Bacterial populations were counted in water samples, water samples shaken with copepods, and water samples shaken with crushed copepods in order to demonstrate the presence of chitin utilizing bacteria in association with copepods.

ANNO

06/08/1987

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ACC 2389
TYPE P
YEAR 1983
AUTH BUCK, P.A.;
TITL COLONIZATION AND SUCCESSION ON ARTIFICIAL SUBSTRATES IN TWO CANALS ON KEY L
ARGO.

BIBL PRESENTED AT BENTHIC ECOL. MEET., FLORIDA INSTITUTE OF TECHNOLOGY,
MELBOURNE, FL.

KEYW MONROE	STRUCTURE	SUBSTRATE
ALGAE	COMMUNITY	ASSEMBLAGE
ARTIFICIAL HABITAT	FOULING	

ABST The community structure and colonizatoion of 2 artificial substrates (concrete blocks and mangrove peat blocks) placed in 2 canal systems (one cut from limestone rock and other from mangrove peat) on Key Largo, Florida were investigated for one year. The blocks were dominated by algae (primarily Chlorophyta and Rhodophyta) and polychaetes. Comparisons between blocks and sites were made for species richness, abundance, and biomass. Communities on the artificial substrates most closely resembled those on the natural substrate that each was intended to imitate. It was concluded that the community structure of a developing biological assemblage was regulated by the substrate type and composition of the surrounding community.

ANNO

06/08/1987

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ACC 4176

TYPE P

YEAR 1975

AUTH BUERKLE, U.;

TITL UNDER WATER NOISE AT AN OFFSHORE DRILLING OPERATION IN THE BAY OF FUNDY.

BIBL CAN. FISH MAR. SERV. TECH. REP. 563:1-13.

KEYW OFFSHORE DRILLING

FISHERY

STRESS

ABST

ANNO

06/08/1987

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ACC 1079
TYPE
YEAR 1956
AUTH BULLIS, H.R. ;
TITL PRELIMINARY RESULTS OF DEEP-WATER EXPLORATION FOR SHRIMP IN THE GULF OF MEX
ICO BY THE M\V OREGON (1950-1956).

BIBL COMM. FISH. REV. 18(12):1-17.

KEYW BIOLOGY COMMERCIAL FISHERY SHRIMP FISHERY
 SPECIES COMPOSITION SHRIMP

ABST

ANNO

ACC 2068
TYPE P
YEAR 1979
AUTH BULLOCK, L.H.; SMITH, G.B.;
TITL IMPACT OF WINTER COLD FRONTS UPON SHALLOW-WATER REEF COMMUNITIES OFF WEST-CENTRAL FLORIDA.

BIBL FLA. SCI. 42(3): 169-171.

KEYW COMMUNITY	REEF	FISH
CORAL	TEMPERATURE	STORM EVENT
DEFAUNATION	STRESS	

ABST SCUBA observations of shallow water (12-37 m) reefs in the eastern Gulf of Mexico during the exceptionally cold winters of 1977 and 1978 revealed damage to the reef biota suffered during passage of cold fronts. Some reef fish were killed or injured either directly from the cold or from physical abrasion against the reef during heavy bottom surge. Recovery time of the damaged reefs is unknown, though coral recovery is undoubtedly slow, since most species are living near their northern limits of distribution.

ANNO

06/08/1987

.....
ACC 2214
TYPE P
YEAR 1959
AUTH BULLIS, H.R.; INGLE, R.M.;
TITL A NEW FISHERY FOR SCALLOPS IN WESTERN FLORIDA.

BIBL PROC. GULF CARIBB. FISH. INST. 11TH ANNU. SESS. P. 75-78

KEYW CALICO SCALLOP COMMERCIAL FISHERY

ABST The initiation of a commercial fishery for the calico scallop, *Pecten (Argopecten) gibbus*, in the Gulf of Mexico is documented in this paper. The Fish and Wildlife Service exploratory vessel, "Oregon", began active exploration for commercial concentrations of *P. gibbus* in 1954. Scallops were first harvested by commercial fishermen in March 1958, near St. Andrews Bay. Production values, locations of other scallop beds, and size distributions are summarized.

ANNO

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ACC 4012
 TYPE P
 YEAR 1976
 AUTH BULLIS, H.R., JR.; JONES, A.C., EDS.;
 TITL PROCEEDINGS: COLLOQUIUM ON SNAPPER-GROUPER FISHERY RESOURCES OF THE WESTERN
 CENTRAL ATLANTIC OCEAN.

BIBL FLORIDA SEA GRANT REP. NO. 17. 331 P.

KEYW BIOLOGY	SOCIOECONOMIC	COMMERCIAL FISHERY
LIFE HISTORY	RECREATIONAL FISHERY	REPRODUCTION
SNAPPER	GROUPER	LANDINGS (POUNDS)
MANAGEMENT		

ABST The purpose of the Colloquium was to assemble information on the snapper and grouper resources in the region and to provide a forum to discuss the problems of the fishing industries. Although these species have supported a major commercial fishery for more than 100 years, a decline in commercial landings became evident after 1965. Concurrently, recreational fishing effort and landings increased rapidly. Commercial landings amounted to 18.3 million pounds in 1974, and recreational fishermen landed an estimated 83 million pounds in 1970. There appears to be increasing fishing pressure on traditional U.S. grounds by other nations as well. Evidence presented in this Colloquium indicates that we now have resource problems in certain regional fisheries and that management is required. At the same time, it is clearly evident that the data base for management is inadequate. The snapper-grouper resource has withstood commercial exploitation for more than 100 years; however, this fishery has, in recent years, been subjected to increased commercial and recreational pressure--not only by the U.S. interest, but also by increasing numbers of other nations as well. It is also experiencing some environmental changes that may have a profound effect on the ability of this fishery to withstand continued increasing pressure. The Gulf States Marine Fisheries Commission recognizes the importance and necessity for a coordinated management policy to deal effectively with the problems of this resource at the state, national, and international level. It was the hope and intent of this commission in prompting the Colloquium to encourage a

ANNO

06/08/1987

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ACC 2503
TYPE P
YEAR 1972
AUTH BUNT, J.S.;LEE, C.C.;LEE, E.;
TITL PRIMARY PRODUCTIVITY AND RELATED DATA FROM TROPICAL AND SUBTROPICAL MARINE
SEDIMENTS.

BIBL MAR. BIOL. 16(1):28-36.

KEYW DADE	PRIMARY PRODUCTIVITY	SEDIMENT
CARBON	ORGANIC CARBON	NUTRIENT
NITROGEN	CHLOROPHYL	

ABST Oxygen exchange and carbon fixation in calcareous sediments were measured in situ at sites off the east coast of Florida and in the Caribbean Sea. Sediment samples were analyzed for total organic carbon, nitrogen, and photosynthetic pigments, and in some cases, interstitial pH and CO₂ concentration.

ANNO

06/08/1987

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ACC 351
TYPE
YEAR 1977
AUTH BUREAU OF LAND MANAGEMENT;
TITL DRAFT ENVIRONMENTAL IMPACT STATEMENT. PROPOSED 1978 OUTER CONTINENTAL SHELF
OIL AND GAS LEASE SALE.

BIBL BUREAU OF LAND MANAGEMENT, GULF OF MEXICO OCS REGIONAL OFFICE, NEW ORLEANS,
LA. OCS NO. 65. 2 VOLS.
KEYW BIOLOGY OCEANOGRAPHY PHYSICAL PROCESS
SOCIOECONOMIC

ABST

ANNO

06/08/1987

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ACC 598

TYPE

YEAR 1980

AUTH BUREAU OF LAND MANAGEMENT;

TITL FINAL ENVIRONMENTAL IMPACT STATEMENT. PROPOSED OUTER CONTINENTAL SHELF OIL
AND GAS LEASE SALES A62 AND 62.

BIBL BUREAU OF LAND MANAGEMENT, GULF OF MEXICO OCS REGIONAL OFFICE, NEW ORLEANS,
LA. 116 PP.

KEYW BIOLOGY
OIL

CONTINENTAL SHELF GEOLOGY
RESOURCE

ABST

ANNO

06/08/1987

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ACC 4223

TYPE P

YEAR 1973

AUTH BUREAU OF LAND MANAGEMENT;

TITL PROPOSED 1973 OUTER CONTINENTAL SHELF OIL AND GAS GENERAL LEASE-SALE, OFFSHORE MISSISSIPPI, ALABAMA, AND FLORIDA, VOLUME 2, POTENTIAL ENVIRONMENTAL IMPACTS, ETC. (ENVIRON. IMPACT STATEMENT).

BIBL AVAILABLE FROM NATIONAL TECH. INFORM. SERV., SPRINGFIELD, VA. 242 P.

KEYW COMMERCIAL FISHERY

OIL

POLLUTION

OIL SPILL BIOLOGY

FISHING

WATER QUALITY

ABST This second volume of the Outer Continental Shelf oil and gas general lease sale, offshore Mississippi, Alabama and Florida environmental impact statement is addressed to the probable environmental impacts of the project and potential mitigating measures. The following environmental impacts were considered: impacts on the living components of the environment (open Gulf, marine life, shoreline, estuaries, and wetlands); impacts on air and water quality; impacts on commercial fishing; conflicts with military uses of the continental shelf; conflicts with ship traffic and navigation; and impacts on the recreational, historical, aesthetic and archaeological features of the area. Potential mitigating measures include oil spill regulations, enforcement and contingency action, and construction of protective structures and pipelines. The unavoidable adverse environmental effects of the projects were also described.

ANNO

06/08/1987

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ACC 4226

TYPE P

YEAR 1973

AUTH BUREAU OF LAND MANAGEMENT;

TITL PROPOSED 1973 OUTER CONTINENTAL SHELF OIL AND GAS GENERAL LEASE SALE, OFFSHORE MISSISSIPPI, ALABAMA AND FLORIDA, VOLUME 4 (FINAL ENVIRONMENTAL STATEMENT).

BIBL AVAILABLE FROM THE NAT'L. TECH. INFORM. SERV., SPRINGFIELD, VA. 335 P.

KEYW OIL

POLLUTION

OIL SPILL

ABST This volume is one of five volumes which comprise the final environmental statement for the outer continental shelf (OCS). This section presents an account of the consultation and coordination processes involved in the preparation of the draft and final statements. All federal and state agency review comments are included, and where appropriate, the disposition of pertinent comments leading to preparation of the final statement are indicated. Also included are public hearing testimony and records, and written comments from private organizations. The major areas of concern expressed by the public were: the veracity of the 'energy crisis'; compatibility of offshore mineral operations with defense activities; the degree of state participation in OCS operations; liability in the event of pollution incidents; the adequacy of operating regulations and enforcement procedures; the need for consideration of alternatives to the proposed action unique to Florida; the need for preparation of cost benefit analyses; and the need for a public referendum concerning whether or not to proceed with the proposal.

ANNO

ACC 4282
TYPE P
YEAR 1978

AUTH BUREAU OF LAND MANAGEMENT, OUTER CONTINENTAL SHELF OFFICE, NEW ORLEANS, LA;
TITL FINAL ENVIRONMENTAL IMPACT STATEMENT. PROPOSED 1978 OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE, OFFSHORE EASTERN GULF OF MEXICO.

BIBL BUREAU OF LAND MANAGEMENT, NEW ORLEANS, LA. 246 P.

KEYW CONTINENTAL SHELF	OIL AND GAS	MAFLA
OIL SPILL	FISHING	BENTHIC
MANATEE	OYSTER	FISHERY
SOCIOECONOMIC		

ABST This proposed oil and gas lease is the third sale for the eastern Gulf of Mexico (MAFLA) region. One hundred and sixteen tracts containing 667,229.28 acres (270,023.99 hectares) of OCS lands are proposed for leasing action. If implemented, this sale is tentatively scheduled to be held in October 1978. Development at the following level is expected: 5 to 25 platforms, 45 to 300 wells, 400 to 700 miles of pipeline, 0 to 2 oil terminals, storage areas, and gas processing plants. An oilspill risk analysis was made for 30 resource categories. Also, each proposed lease tract has received a proximity evaluation using a matrix technique to identify significant environmental impacts should leasing and subsequent oil and gas exploration and production ensue. All tracts offered pose some degree of risk to the environment. Accidental or chronic oil spillage is the chief potential cause of impact. Other sources of impact include platform and pipeline installation. The principal adverse impacts that will occur include: some minimal effects on recreational beaches in the Mississippi Sound area, localized effects on recreational and commercial fishing grounds (particularly oysters) and benthic organisms at sites of development, some potential danger to the habitat of the Florida manatee and unknown but potential effect on archaeological sites. Existing air and water quality onshore will be adversely impacted by operations of gas processing plants, should they be constructed. Beneficial economic impact is anticipated in employment and income with some adverse effect from induced development growth patterns in local areas.

ANNO

06/08/1987

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ACC 2336
TYPE P
YEAR 1975
AUTH BYLE, W.K.;
TITL I-75 NORTH SOUND STUDY.

BIBL REPT. SUBMITTED BY ENVIRONMENTAL SERVICES UNLIMITED.

KEYW LEE	SUBSTRATE	BENTHIC
DISTRIBUTION	CIRCULATION	INVERTEBRATE
TEMPERATURE	SALINITY	DO
TURBIDITY	CURRENTS	

ABST The biophysical characteristics of the North Sound study area are described . Those portions of the Sound with elevations ranging from -1.2 ft below mean sea level to 3.5 ft below mean sea level and having a fairly firm substrate (as opposed to areas high in silts, clays and/or detritus) were found to support relatively larger populations of benthic organisms than the deeper or shallower areas (regardless of substrate). The distribution and type of species are related to the substrate, which in turn is related to existing water circulation patterns. Most of the North Sound was determined to be comparatively healthy, physically and biologically.

ANNO

06/08/1987

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ACC 2222

TYPE P

YEAR 1976

AUTH BYRNE, C.J.;

TITL THE EFFECTS OF THE WATER SOLUBLE FRACTIONS OF CRUDE AND REFINED OILS ON THE
LARVAE OF THE QUAHOG CLAM MERCENARIA SP.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW OIL
HYDROCARBON
OILSPILL

LARVAE
MOLLUSC

HEAVY METAL
BIOASSAY

ABST Bioassays were conducted to determine the effects of the water soluble fractions (WSF's) of six test oils common to the Gulf of Mexico coastal region on the embryos and veliger larvae of the quahog clam. It was found that the WSF's of the crude oils. The WSF's of the Florida "Jay" crude and the used crankcase motor oil were the most toxic of all the oils tested. However, they possess other toxicants (e.g., heavy metals and sulphur compounds) in addition to the petroleum hydrocarbons. Although the concentrations of petroleum hydrocarbons used were relatively high and were not found in the natural marine environment, it was concluded that, in an oil spill, concentrations could reach these values with possible toxic effects.

ANNO

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ACC 343

TYPE

YEAR 1983

AUTH CAILLOUET, C.W.; KOI, D.B.;

TITL SIZE COMPOSITION OF MONTHLY CATCHES OF BROWN SHRIMP FROM THE TEXAS COAST, MISSISSIPPI RIVER TO TEXAS, AND PENSACOLA TO THE MISSISSIPPI RIVER, 1960- 1981.

BIBL NATIONAL MARINE FISHERIES SERVICE, BIOLOGICAL LABORATORY, GALVESTON, TX. NO AA-TM-NMFS-SEFC-116. 78 PP.

KEYW	BIOLOGY	COASTAL WATER	FISHERY
	FISHERY STATISTICS	POPULATION DYNAMICS	SHRIMP FISHERY
	BROWN SHRIMP	MANAGEMENT	RECRUITMENT
	GROWTH	MORTALITY	

ABST The report summarizes information concerning the biology and population dynamics of brown shrimp in the context of management of the fishery for this species in the Gulf of Mexico. The size composition of the reported monthly catches of brown shrimp, *Penaeus aztecus*, reflects the combined effects of recruitment, growth and mortality, including losses due to natural causes and those caused by fishing. Annually recurring recruitment has an obvious effect of reducing the size of brown shrimp in the monthly catches, but the time-phasing of open seasons and the intensity of fishing can also alter the size composition patterns.

ANNO

ACC 344

TYPE

YEAR 1979

AUTH CAILLOUET, C.W.;PATELLA, F.J.;JACKSON, W.B.;

TITL RELATIONSHIP BETWEEN MARKETING CATEGORY (COUNT) COMPOSITION AND EX-VESSEL VALUE OF REPORTED ANNUAL CATCHES OF SHRIMP IN THE EASTERN GULF OF MEXICO.

BIBL MAR. FISH. REV. 41(5-6):1-7.

KEYW	BIOLOGY	COASTAL WATER	FISHERY
	SHRIMP FISHERY	SHRIMP	PINK SHRIMP
	BROWN SHRIMP		

ABST The shrimp fisheries of the eastern Gulf of Mexico are analyzed. They are those of Mississippi, Alabama, and west coast of Florida, and includes pink shrimp, *P. duorarum*, as well as brown and white shrimp. Harvesting strategy refers to the sizes of shrimp harvested, retained, and landed. The relationship between estimated ex-vessel value and weight of reported annual catches of a given species in a given region holds remarkably well over a wide range of fluctuations in reported annual catches. In fisheries, such as shrimp fisheries of the Gulf of Mexico, in which wide fluctuations occur in annual yield in response to fluctuations in recruitment, the best that can be done is to make the best use of whatever recruitment occurs. This lends support to the concept of management of shrimp fisheries by minimum size limits or other approaches which regulate the size of shrimp at first harvest, i.e., closed areas or seasons.

ANNO

06/09/1987

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ACC 2504
TYPE P
YEAR 1971
AUTH CAILLOUET, G.W., JR.; BEARDSLEY, G.L.;
TITL NOTES ON SIZE, SEX RATIO, AND SPAWNING OF SPINY LOBSTER, PANULIRUS
GUTTATUS (LATREILLE) NEAR MIAMI BEACH, FL.

BIBL BULL. MAR. SCI. 21(4):944-951.

KEYW DADE	SPAWNING	SPINY LOBSTER
TEMPERATURE	SALINITY	ABUNDANCE
HABITAT	DISTRIBUTION	

ABST Spiny lobsters, *Panulirus guttatus*, were collected from jetties bordering Government Cut, near Miami Beach, Florida, from June to October 1970. Variations in size distribution, sex ratio, and proportion of ovigerous females were determined. Abundance and habitat of *P. guttatus* were compared to those of *P. argus*.

ANNO

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ACC 4013
 TYPE P
 YEAR 1981
 AUTH CAILLOUET, C.W.;KOI, D.B.;
 TITL TRENDS IN EX-VESSEL VALUE AND SIZE COMPOSITION OF REPORTED ANNUAL CATCHES OF PINK SHRIMP FROM THE TORTUGAS FISHERY, 1969-1978.

BIBL GULF RES. REP. 7(1):71-78.

KEYW COMMERCIAL FISHERY	PINK SHRIMP	MANAGEMENT
SOCIOECONOMIC	CRUSTACEA	LANDINGS (VALUE)
LANDINGS (POUNDS)	COASTAL	

ABST Exponential modes were used to characterize (1) ex-vessel value (in dollars) per shrimp by size category (count; i.e., number of shrimp per pound, heads off), (2) size composition (expressed as cumulative weight of the catch in pounds, heads off, by size category), and (3) ex-vessel value composition (expressed as cumulative ex-vessel value, in dollars, of the catch by size category) for reported annual catches (inshore and offshore combined) of pink shrimp (*Penaeus duorarum duorarum*) from the Tortugas fishery (statistical areas 1 and 2 combined) from 1960 to 1978. Exponents of the models were used as indices to investigate trends in ex-vessel value per shrimp, in size composition, and in ex-vessel value composition of the annual catches during that period. Both the spread in ex-vessel value per shrimp among size categories and the size of the shrimp in the annual catches increased from 1960 to 1978. Also, the proportion of the ex-vessel value made up of shrimp of larger sizes increased from 1960 to 1978. This approach to analysis of catch statistics can be used to monitor the fishery, and the results can be compared with changes that may be brought about by permanently closing the Tortugas shrimp sanctuary in 1981, as proposed by the Gulf of Mexico Fishery Management Council in the fishery management plan for the shrimp fishery of the Gulf of Mexico.

ANNO

06/09/1987

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ACC 2069
TYPE P
YEAR 1983
AUTH CAINE, E.A.;
TITL COMMUNITY INTERACTIONS OF CAPRELLA PENANTIS CRUSTACEA AMPHIPODS ON SEA WHIP
S.

BIBL J. CRUSTACEAN BIOL. 3(4):497-504.

KEYW COMMUNITY	CRUSTACEA	EPIFAUNA
BENTHIC	SEA WHIP	SEAGRASS

ABST Caprella penantis is the dominant epifauna on sea whips, Leptogorgia virgulaa, occurring in Thalassia testudinum meadows in northwestern Florida. Caprella penantis densities were 23 times greater in winter when Thalassia dies back and fish predators are absent. The reduced densities may be caused by fish predation but the increases are a result of increased reproductive activity. After several molts the caprellids leave the sea whips to join the benthic macrofaunal community.

ANNO

06/09/1987

.....
ACC 2070
TYPE P
YEAR 1977
AUTH CAIRNS, S.D.;
TITL GUIDE TO THE COMMONER SHALLOW-WATER GORGONIANS (SEA WHIPS, SEA FEATHERS, AND SEA FANS) OF THE GULF OF MEXICO AND THE CARIBBEAN REGION.

BIBL SEA GRANT FIELD GUIDE SERIES NUMBER 6. 74 P.

KEYW GORGONIAN SEA WHIP COELENTERATE

ABST General descriptions of the more common Florida, shallow-water gorgonians (phylum Coelenterata) are provided. This guide covers 27 species (of a total of 170 species of gorgonians known in the West Indian Province) that could be encountered without the use of SCUBA. A key to the identification of species was included.

ANNO

06/09/1987

.....
ACC 4400
TYPE P
YEAR 1977
AUTH CAIRNS, S.D.;
TITL STONY CORALS I. CARYOPHYLLIINA AND DENDROPHYLLIINA (ANTHOZOA: SCLERACTINIA)
. MEMOIRS OF THE HOURGLASS CRUISES. VOL. I, PART IV.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PE
TERSBERG, FL. 27 P.

KEYW CORAL	CONTINENTAL SHELF	SCLERACTINIA
BIOLOGY	INVERTEBRATE	EPIFAUNA
ZOOGEOGRAPHY	SYSTEMATIC	HOURGLASS
BENTHIC	ECOLOGY	

ABST Six species of coral belonging to the Scleractinian suborders Caryophylliina and Dendrophylliina were collected during Project Hourglass, including two new species. All species are described, illustrated and accompanied by synonymies. Five of the six species represent new distributional records for the Gulf of Mexico. A list of the 36 ahermatypes known from the Gulf of Mexico is presented. A key is provided for 32 ahermatypes reported from the eastern Gulf shelf and slope region.

ANNO

06/09/1987

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ACC 1209
TYPE P
YEAR 1975
AUTH CAKE, E.W., JR.;
TITL LARVAL AND POSTLARVAL CESTODE PARASITES OF SHALLOW WATER, BENTHIC MOLLUSCS
OF THE GULF OF MEXICO FROM THE FLORIDA KEYS TO THE MISSISSIPPI SOUND.

BIBL FLA. STATE UNIV. PH.D. THESIS.

KEYW LARVAL MOLLUSC DISTRIBUTION
PARASITE

ABST Twelve species of cestodes were found in 2,470 specimens of benthic molluscs collected from the eastern Gulf of Mexico. Results show that benthic marine molluscs are hosts of many elasmobranch tapeworms. Host specificity was rarely found in these cestode-mollusc associations. Six of the species were found throughout the study area, while the other 6 had limited distribution patterns. The higher infection rates, infection loads, and cestode species diversity occurred in molluscs from shallow sand, mud, and grassflats. This environment serves as nursery grounds for the larval cestodes.

ANNO

06/09/1987

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ACC 2006
TYPE P
YEAR 1975
AUTH CAKE, E.W., JR.;
TITL LARVAL AND POSTLARVAL CESTODE PAASITES OF SHALLOW WATER, BENTHIC MOLLUSCS O
F THE GULF OF MEXICO FROM THE FLORIDA KEYS TO THE MISSISSIPPI SOUND.

BIBL PH.D. THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW LARVAL BENTHIC MOLLUSCS
DISTRIBUTION

ABST Twelve species of cestodes were found in 2,470 specimens of benthic mollusc
s collected from the eastern Gulf of Mexico. Results show that benthic mar
ine molluscs are hosts for many elasmobranch tapeworms. Host specificity w
as rarely found in these cestode-mollusc associations. Six of the species
were found throughout the study area, while the other 6 had limited distrib
ution patterns. The higher infection rates, infection loads, and cestode s
pecies diversity occurred in molluscs from shallow sand, mud, and grassflat
s. This environment serves as nursery grounds for the larval cestodes.

ANNO

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ACC 238

TYPE

YEAR 1973

AUTH CALDWELL, D.K.; CALDWELL, M.C.;

TITL MARINE MAMMALS OF THE EASTERN GULF OF MEXICO.

IN: J.I. JONES, M.E. RING, M.O. RINKEL, AND R.E. SMITH, EDS.

A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBURG, FL.

KEYW MAFLA	MAMMALIA	BIOLOGY
DOLPHIN	MARINE	WHALE
CETACEAN	MANATEE	DISTRIBUTION

ABST Positive records of marine mammals from the eastern Gulf of Mexico (i.e., Florida, Alabama, and Mississippi) are listed with annotations, and maps are included to show the locations of the records. The species for which there are specific records are Black Right Whale (*Balaena glacialis*), Minke or Little Piked Whale (*Balaenoptera acutorostrata*), Bryde Whale (*Balaenoptera edeni*), Fin Whale (*Balaenoptera phsalus*), Humpback Whale (*Megaptera novaeangliae*), Rough-toothed Dolphin (*Steno bredanensis*), Atlantic Bottlenosed Dolphin (*Tursiops truncatus*), Gray Grampus or Risso's Dolphin (*Grampus griseus*), Longsnouted Dolphin (*Stenella longirostris*), Bridled Dolphin (*Stenella frontalis*), Spotted Saddleback Dolphin (*Delphinus delphis*), Short-finned Pilot Whale or Blackfish (*Globicephala macrorhyncha*), Killer Whale (*Orcinus orca*), Sperm Whale (*Physeter catodon*), Pygmy Sperm Whale (*Kogia breviceps*), Dwarf Sperm Whale (*Kogia simus*), Antellean Beaked Whale (*Mesoplodon europaeus*), Goose-beaked or Cuvier's Beaked Whale (*Ziphius cavirostris*), Manatee or Sea Cow (*Trichechus manatus latirostris*), and California Sea Lion (*Zalophus californianus*). The former presence of the now apparently extinct Caribbean Monk Seal (*Monachus tropicalis*) within the eastern Gulf is noted. Comments are included on additional Gulf records from outside the study area as they relate to the eastern Gulf. Species recorded from within the Gulf but not yet positively from the eastern Gulf study area are Sei Whale (*Balaenoptera borealis*), Blue Whale (*Balaenoptera musculus*)-- it is noted that the records of the Blue Whale from elsewhere in the Gulf are questionable, Pygmy Kill

ANNO

06/09/1987

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ACC 781
TYPE
YEAR 1959
AUTH CALDWELL, D.K. ;
TITL THE LOGGERHEAD TURTLES OF CAPE ROMAIN, SOUTH CAROLINA.

BIBL FLORIDA STATE MUSEUM BULL. 4(10):319-348.

KEYW REPTILIA BIOLOGY ECOLOGY
LIFE HISTORY SPECIES COMPOSITION HERPETOFAUNA
TURTLE

ABST This work is a synopsis of information concerning studies conducted on the
Logger head turtle. It draws heavily upon research reported by Baldwin and
Lofton (1940). Every attempt was made not to overlap existing published wor
ks.

ANNO

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ACC 1043
 TYPE
 YEAR 1979
 AUTH CALDER, K.L.;HADDAD, K.D.;
 TITL TRANSMISSOMETRY ON THE EASTERN GULF SHELVES, MAFLA SURVEY 1976-1978.

IN: THE MISSISSIPPI, ALABAMA, FLORIDA OUTER CONTINENTAL SHELF
 BASELINE ENVIRONMENTAL SURVEY 1977/1978. COMPENDIUM OF WORK ELEMENT
 REPORTS.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, DC.
 VOL. IIB:931-989.

KEYW LOOP CURRENT	BOTTOM CURRENT	NEPHELOID LAYER
CONTINENTAL SHELF	PHYSICAL OCEANOGRAPH	SEASONAL VARIATION
MAFLA	TURBIDITY	SUSPENDED
SEDIMENT		

ABST Water clarity in the eastern Gulf of Mexico increases away from vertical or horizontal interfaces. In the benthic boundary layer it increases with a decrease in turbulent energy (currents, seiches, internal waves, hurricanes) available to act on the bottom. In the surface layer, turbidity was largely related to runoff or biological productivity. Water of a clarity comparable to Sargasso Sea water was measured in the Loop Current, which was found at times at the seaward ends of all transects. This water was 50 to 100 times as clear as water found at the northern winter stations in the nepheloid layer. Near-bottom water clarity was affected by non-periodic (Loop Current) and periodic (internal waves, seiches, inertial currents) bottom currents, with nepheloid layers found at times in all regions of the study area. However, the rapidly shoaling, fine sediment-laden shelf off Mobile resulted in nepheloid layers during all sampling seasons. The Loop Current is the primary transport mechanism for particles in the study areas. The periodic current phenomena do not result in a net transport unless they are superimposed upon a current with a net directionality. However, they do provide significant erosional energy to the bottom which, coupled even with a slow (non-eroding) current, could result in a net sediment transport. In the summer and fall when the Loop Current intrudes furthest into the Gulf of Mexico, a net southward transport of outer shelf sediments should result. During the winter, when northerly or northeasterly winds blow in conjunction with seiche activity, a general westward to northwestward transport of sediments

ANNO

06/09/1987

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ACC 2289
TYPE P
YEAR 1982
AUTH CALINSKI, M.D.
TITL THE FUTURE OF LOBSTER FARMING IN FLORIDA.

BIBL FLORIDA SCI. 45 (SUPPL. 1): 31

KEYW SARASOTA SPINY LOBSTER LARVAE

ABST Self-contained prototype nursery habitats designed to attract and culture puerulus stage spiny lobsters, *Panulirus argus* were successfully tested on a small scale. Data indicate that settled post larvae attain a size in which they can leave the habitat in 3 months, and that 20% survive this period. Requirements and benefits of lobster farming are discussed.

ANNO

06/09/1987

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ACC 4015
TYPE P
YEAR 1973
AUTH CAMP, D.K.;
TITL STOMAPOD CRUSTACEA. MEMOIRS OF THE HOURGLASS CRUISES. VOL. III, PART. II.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 100 P.

KEYW CRUSTACEA	SYSTEMATIC	DISTRIBUTION
ZOOGEOGRAPHY	ECOLOGY	BIOLOGY
HOURGLASS	BENTHIC	INVERTEBRATE
EPIFAUNA	CONTINENTAL SHELF	

ABST Thirteen species of stomatopod crustacean (*Lysiosquilla scabricauda*, *Acanthosquilla biminiensis*, *Platysquilla horologii*, *Meiosquilla quadridens*, *M. schmitti*, *Squilla grenadensis*, *S. rugosa*, *S. decepatrix*, *S. neglecta*, *S. empusa*, *Eurysquilla plumata*, *Parasquilla coccinea*, and *Gonodactylus bredini*) were captured in a 28 month sampling program at ten stations (6 to 73 m) along two transects on the central west Florida shelf. Variations in morphology and meristics of most species are presented. Post larvae of *Acanthosquilla biminiensis*, *Parasquilla coccinea*, and an unidentified *Squilla* species (probably *S. decepatrix*) are described. Juveniles of *Meiosquilla quadridens*, *M. schmitti*, *Eurysquilla plumata*, *Parasquilla coccinea* and *Gonodactylus bredini* are described or compared with adults. An ectocommensal folliculinid protozoan is reported from gills of an *Acanthosquilla biminiensis*.

ANNO

06/09/1987

.....
ACC 2007
TYPE P
YEAR 1978
AUTH CAPONE, D.G.;
TITL DINITROGEN FIXATION IN SUBTROPICAL SEAGRASS AND MACROALGAL COMMUNITIES.

BIBL PH.D. DISSERTATION. UNIVERSITY OF MIAMI, MIAMI, FL. 93 P.

KEYW COMMUNITY	SEAGRASS	MACROALGAE
BENTHIC	NITROGEN	BACTERIA

ABST Nitrogen fixation was studied in seagrass (*Thalassia testudinum*) meadows and the macroalgae *Microdictyon* sp. and *Laurencia* sp. Nitrogen fixation was found to be highly variable both spatially and temporally in the phyllosphere of *Thalassia*. High rates of nitrogen fixation were correlated with the presence of a heterocystous cyanobacterium, *Calothrix* sp. Seasonal and diurnal fluctuations were detected in phyllosphere nitrogen fixation. Rhizosphere nitrogen fixation was compared with that of the phyllosphere. Nitrogen fixation associated with benthic macroalgae was also mediated by cyanobacteria.

ANNO

06/09/1987

.....
ACC 4198
TYPE P
YEAR 1985
AUTH CAPRI, S.;
TITL DETERMINATION OF LOW-TOXICITY OILS IN DISCHARGES FROM OFFSHORE DRILLING OPE
RATIONS.

BIBL METODI ANAL. ACQUE 5(1):10-15.

KEYW OFFSHORE DRILLING HYDROCARBON POLLUTION

ABST

ANNO

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ACC 4016
 TYPE P
 YEAR 1985
 AUTH CARDER, K.L.; STEWARD, R.G.;
 TITL A REMOTE-SENSING REFLECTANCE MODEL OF A RED-TIDE DINOFLAGELLATE OFF WEST FLORIDA.

BIBL LIMNOL. OCEANOGR. 30(2):286-298.

KEYW IRRADIANCE	PHYTOPLANKTON	PIGMENT
RED TIDE	NUMERICAL MODEL	REMOTE SENSING
WATER COLUMN	NUTRIENT	STRESS

ABST A mathematical model that simulates the spectral curves of remote-sensing reflectance of blooms of the red-tide dinoflagellate *Ptychodiscus brevis* is developed. The model is compared to measurements obtained from a low-flying helicopter for *P. brevis* populations with chlorophyll-like pigment concentrations from 7 to 77 mg m⁻³ found in the case 2 waters along the west Florida shelf in October 1983. The model simulates the effects of backscattering from water, phytoplankton, and detritus, and the effects of absorption due to water, phytoplankton, detritus, and yellow dissolved matter ("Gelbstoff") for case 1 and case 2 waters. It can be easily modified to simulate the spectral reflectance of phytoplankton from other pigment color groups. Matching the model spectral curves to measured remote-sensing reflectance curves provides accurate estimates of chlorophyll a plus pheophytin a and also estimates of Gelbstoff and detritus concentrations. Comparison of remote-sensing reflectance data to model reflectance data allows calculation of the quantum efficiency of fluorescence for a given phytoplankton population, which provides a remote measurement of a factor that has been found to increase with the nutrient stress of the population.

ANNO

06/09/1987

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ACC 780
TYPE
YEAR 1963
AUTH CARR, A.F.;
TITL PANSPECIFIC REPRODUCTIVE CONVERGENCE IN LEPIDOCHELYS KEMPI.

BIBL ERGEBNISSE DER BIOLOGIE 26:298-303.

KEYW REPTILIA	ABUNDANCE	BIOLOGY
COASTAL WATER	ECOLOGY	REPRODUCTION
SPECIES COMPOSITION	HERPETOFAUNA	TURTLE

ABST

ANNO

06/09/1987

.....
ACC 686
TYPE
YEAR 1983
AUTH CARTER, M.T.;
TITL PROBABILITY OF HURRICANE/TROPICAL STORM CONDITIONS: A USERS GUIDE FOR LOCAL
DECISION MAKERS.

BIBL NATIONAL CLIMATIC DATA CENTER, ASHEVELLE, NC. 25 PP.

KEYW COASTAL WATAER FORECASTING HURRICANE
METEOROLOGY STATISTICAL ANALYSIS

ABST In a growing number of communities along the Atlantic and Gulf coasts, local decision makers must begin initiating protective actions before the National Hurricane Center can confidently issue a Hurricane Warning for their community. In an attempt to provide these decision makers with useful long range forecasts of a hurricane's movement, the National Hurricane Center will issue probabilities that the hurricane will affect any of 44 communities from Brownsville, Texas, to Eastport, Maine. This manual was written to acquaint local decision makers with some of the characteristics of these probabilities and outline some of the ways that they may be used to guide decision making when facing a hurricane threat. While it is hoped that local decision makers find this manual useful in effectively utilizing this new forecast information, it should be remembered that National Weather Service field personnel are available, as always, to answer any questions and to provide specific interpretations of both the probabilities and the forecast tracks that are issued for any given storm.

ANNO

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ACC 2351
TYPE P
YEAR 1973
AUTH CARTER, M.R.; ET AL.;
TITL ECOSYSTSEM ANALYSIS OF THE BIG CYPRESS SWAMP AND ESTUARIES.

BIBL U.S. ENVIRONMENTAL PROTECTION AGENCY, SURVEILLANCE AND ANALYSIS
DIVISION, EPA 904/9-74-002, 477 P.

KEYW COLLIER	SEDIMENT	FISH
LIFE HISTORY	SNOOK	TEMPERATURE
SALINITY	NUTRIENT	CHEMISTRY
WATER QUALITY	ESTUARY	

ABST This study examined natural and disturbed ecosystems in the Big Cypress Swamp and the Ten Thousand Islands. A detailed characterization of the study area was made including background data on chemical quality of water and sediments; pesticide levels in water; sediment; fish and higher animals; and life histories of several freshwater and marine fishes, especially snook. Several detailed studies relating to man-made changes to the environment were conducted including salinity variations in natural versus man-influenced estuaries, and the effects of canals and other drainage on ground and surface waters.

ANNO

06/09/1987

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ACC 2041
TYPE P
YEAR 1918
AUTH CARY, L.R.;
TITL STUDIES ON ALCYONARIA AT TORTUGAS.

BIBL CARNEGIE INST. WASH. YR. BOOK 16:175-177.

KEYW GROWTH CORAL DEPTH
 TEMPERATURE STRESS

ABST The growth rate of Alcyonarian corals were measured at Dry Tortugas, Florida. The effects of depth and temperature on growth rate were examined. The upper thermal lethal levels were determined for 13 species and their ecological significance discussed. Oxygen consumption rates were also measured and related to thermal stress.

ANNO

06/09/1987

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ACC 870

TYPE

YEAR 1978

AUTH CAVE, N.R.;

TITL PREDATOR PREY RELATIONSHIPS INVOLVING THE AMERICA OYSTER, CRASSOSTREA VIRGINICA (GMELIN), AND THE BLACK DRUM, PAGONIAS CROMIS (LINNAEUS), IN MISSISSIPPI SOUND.

BIBL MASTER'S THESIS. UNIVERSITY OF SOUTHWESTERN LOUISIANA, HAMMOND, LA. 43 PP.

KEYW DEMERSAL FISHES
PREDATION

OYSTER

FEEDING HABIT

ABST The purposes of this investigation were: (1) to observe the exact feeding behavior of captive drum on oysters and faunal associates of oysters; (2) to determine the rate and extent of predation under various experimental and natural conditions; (3) to determine prey selectivity of drum using oysters and invertebrate species normally associated with oysters; and (4) to assess the feasibility of preventing predation under experimental conditions using hatchery reared seed oysters or other bedded stock. This investigation was conducted between 1976 and 1978.

ANNO

06/09/1987

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ACC 2008
TYPE P
YEAR 1975
AUTH CHALKER, B.E.;
TITL CALCIFICATION, METABOLISM, AND GROWTH BY THE STAGHORN CORAL, ACROPORA CERVI
CORNIS (LAMARCK).

BIBL PH.D. DISSERATION. UNIVERSITY OF MIAMI, MIAMI, FL.

KEYW METABOLISM GROWTH CORAL
REEF LIGHT

ABST Calcification in the staghorn coral, *Acropora cervicornis*, was investigated and compared to a Pacific congener, *A. formosa*. The effects of exogenous glucose, glycerol, and alanine on the calcification rate were determined under light and dark conditions in the presence of the photosynthetic inhibitor DCMU. The mechanisms of calcification and their kinetics were examined by use of various inhibitors.

ANNO

06/09/1987

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ACC 4208

TYPE P

YEAR 1979

AUTH CHAMBERS, J.E.; HEITZ, J.R.; MCCORKLE, F.M.; YARBROUGH, J.D.;

TITL ENZYME ACTIVITIES FOLLOWING CHRONIC EXPOSURE TO CRUDE OIL IN A SIMULATED EC
OSYSTEM. II: STRIPED MULLET.

BIBL ENVIRON. RES. 20(1):140-147.

KEYW OIL
FISH
SEASONAL

PHYSIOLOGICAL
POLLUTION
MULLET

OIL SPILL
BASELINE STUDY

ABST Enzyme activities were investigated in brain, gill, liver, and muscle homogenates from striped mullet which had been exposed to crude oil for 10 months in a simulated estuarine ecosystem. Enzymes assayed included acetylcholinesterase, alkaline phosphatase, Beta-glucuronidase, glutamic-pyruvic transaminase, lactic dehydrogenase, and malic dehydrogenase. Few seasonal trends in enzyme activities were observed. Alterations in some enzyme activities, particularly acetylcholinesterase, Beta-glucuronidase, and malic dehydrogenase, may have reflected physiological changes in the mullet resulting from stress. In general, there were few chronic alterations in mullet enzyme activities resulting from the oil spill. (See also W80-03541) (Sinha-OEIS)

ANNO

06/09/1987

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ACC 118
TYPE
YEAR 1982
AUTH CHAN, L.H.;HANOR, J.S.;
TITL DISSOLVED BARIUM IN SOME LOUISIANA OFFSHORE WATERS: PROBLEMS IN ESTABLISHING
G BASELINE VALUES.

BIBL CONTRIB. MAR. SCI. 25:149-159.

KEYW COASTAL ZONE OFFSHORE EXPLORATION CONTINENTAL SHELF
 PHYSICAL PROCESS WATER QUALITY BARIUM
 OFFSHORE DRILLING DRILLING DRILLING FLUID

ABST Dissolved barium values in samples of Louisiana offshore waters collected during the Gulf Universities Research Consortium--Offshore Ecology Investigation range from 31 to 67 ug/kg in waters of chlorinities of 11 to 19 g/l. The barium values are higher than normal open Gulf of Mexico values (11-12 ug/kg) and are in excess of those reasonably expected from conservative mixing of Mississippi River and Gulf waters. It is possible that some of this excess barium is the result of the discharge of effluents from offshore drilling platforms. Much of it, however, can probably be accounted for by simple desorption of barium from river-borne suspended material during natural processes of estuarine mixing. Additional work is required to quantify the relative contributions of natural and anthropogenic sources of barium.

ANNO

06/09/1987

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ACC 779

TYPE

YEAR 1975

AUTH CHAN, H.S.;

TITL A STUDY OF THE TRANSFER PROCESSES OF PHTHALATE ESTERS TO THE MARINE ENVIRONMENT.

BIBL PH.D DISSERTATION. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 133 PP.

KEYW PESTICIDES

WATER COLUMN

PHTHALATE

PCB

SEDIMENT

POLLUTION

ABST Sediment and water samples were collected from 34 stations in the Gulf of Mexico, biota samples from 24 stations and air samples from 8 stations between June 1973 and February 1975. Samples were analyzed for DDT, DDE, PCB's and phthalates.

ANNO

06/09/1987

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ACC 2391

TYPE P

YEAR 1969

AUTH CHANCE, F.A., JR.;

TITL A NEW GENUS AND FIVE NEW SPECIES OF SHRIMPS (DECAPODA, PALAEMONIDAE, PONTON
UAE) FROM THE WESTERN ATLANTIC.

BIBL CRUSTACEANA, 16(PT. 3):251-272.

KEYW MONROE

SHRIMP

ABST Descriptions and measurements of a new genus and 5 new shrimp species found
off Florida coasts were presented. The newly described species were *Periclimenes crinoidalis*, *Periclimenes meyeri*, *Periclimenes paivai*, *Tuleariocaris neglecta*, and *Lipke holtuise*. *Lepkebe* was the newly described genus.

ANNO

06/09/1987

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ACC 2392
TYPE P
YEAR 1977
AUTH CHAN, E.I.;
TITL OIL POLLUTION AND TROPICAL LITTORAL COMMUNITIES: BIOLOGICAL EFFECTS OF THE
1975 FLORIDA KEYS OIL SPILL.

BIBL AM. PETRO. INST. PUBL. #4284:539-542.

KEYW MONROE	OIL	POLLUTION
OIL SPILL	SEAGRASS	MORTALITY
ECHINODERM	CRAB	TEMPERATURE
STRESS		

ABST An assessment was made of the biological effects of the 1975 Florida Keys oil spill. Floating seagrass was found to serve as a natural sorbent for oil. The seagrass became stranded in the intertidal zone. A soluble component of oil or possibly an organic cleaning solvent leaching from this debris was determined to be the probable cause of a mass mortality of subtidal echinoderms on the rocky platform. Several crab species were eliminated from the rocky shores, mangrove fringes and Batis marsh communities for several months. Subtidal pearl oysters suffered extensive mortalities. Death was the result for more than 50% oiling of red mangrove seedling leaves and dwarf black mangrove pneumatophores. Elevated temperatures exceeding the lethal units for many intertidal organisms were observed in oil covered substrates. Oil persisted in the substrate of rocky shores and mangrove marsh areas for at least one year after the spill.

ANNO

06/09/1987

.....
ACC 4017
TYPE P
YEAR 1976
AUTH CHAN, E.I.;
TITL OIL POLLUTION AND TROPICAL LITTORAL COMMUNITIES: BIOLOGICAL EFFECTS OF THE
1975 FLORIDA KEYS OIL SPILL.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL. 72 P.

KEYW OIL SPILL	POLLUTION	BIOLOGY
ECOLOGY	OIL RESIDUE	SEAGRASS
REEF	INTERTIDAL	COASTAL

ABST This study reported observations on the distribution and biological effects of an oil spill in tropical littoral communities of the Florida Keys for a period of six months. Floating seagrasses served as natural sorbents of floating oil and were stranded in the intertidal zone. A soluble component of oil leaching from this debris contributed to a mass mortality of subtidal echinoderms on the rocky platform. Oil penetrated sandy intertidal substrates to a depth of ten centimeters. Formation and erosion of a hard, tarry crust overlying the oil-saturated sand was noted. Several crab species were eliminated from rocky shore, mangrove fringe and Batis marsh communities for several months. Subtidal *Pinctada radiata* from the grass flat community suffered extensive mortalities attributable to a soluble component of the oil. *Rhizophora mangle* seedlings of the mangrove fringe and swamp sustaining greater than 50% oiling of their leaves were killed. Dwarf *Avicennia nitida* with greater than 50% oiling of pneumatophores also perished. Lesser degrees of oil coating resulted in continued growth despite leaf loss and chemical burn scars. Elevated temperatures exceeding upper lethal limits of many intertidal organisms were reported for oil covered substrates. The result of clean-up attempts interfered with damage assessment in the mangrove swamp-Batis marsh. No deleterious effects were observed on the submerged offshore coral reefs.

ANNO

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ACC 751
 TYPE
 YEAR 1977
 AUTH CHAO, L.N.;MUSICK, J.A.;
 TITL LIFE HISTORY, FEEDING HABITS AND FUNCTIONAL MORPHOLOGY OF JUVENILE SCIAENID
 FISHES IN THE YORK RIVER ESTUARY, VIRGINIA.

BIBL FISH. BULL. 75:657-702.

KEYW	BIOLOGY	ECOLOGY	ESTUARY
	FEEDING HABIT	FISH	LIFE HISTORY
	SPAWNING		

ABST Four abundant sciaenid fishes, *Cynoscion regalis*, *Bairdiella chrysoura*, *Micropogonias undulatus*, and *Leiostomus xanthurus*, use York River, Va., as a nursery and adult seasonal feeding ground. In addition, six species of sciaenids, *Menticirrhus saxatilis*, *M. americanus*, *Sciaenops ocellata*, *Cynoscion nebulosus*, *Pogonias cromis*, and *Larimus fasciatus*, are present in the estuary occasionally. Yearling *C. regalis* were first caught in March or April and young-of-the-year in July or August. Yearling *B. chrysoura* were first caught in March or April and young-of-the-year in July or August. Juvenile *Micropogonias undulatus* and *Leiostomus xanthurus* may be present in the York River all year-round. Young-of-the-year *L. xanthurus* were first caught in April and *M. undulatus* were first caught in August. Small *M. undulatus* (<20 mm TL) were caught from August to June, which may indicate a prolonged spawning season (or a late spawning stock). Emigration to the ocean was found in all the four species during late fall or early winter. Water temperature and dissolved oxygen seemed to be the most important factors in the spatial and temporal distributions of these four species in the York River. Mouth position, dentition, gill rakers, digestive tract, pores and barbels, nares, and body shape of six sciaenid species, *Larimus fasciatus*, *C. regalis*, *B. chrysoura*, *M. undulatus*, *Menticirrhus saxatilis*, and *Leiostomus xanthurus*, were found to be important in locating and ingesting prey in the water column. Stomach contents indicated that the food partitioning of these six species was closely correlated with the species and their prey

ANNO

06/09/1987

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ACC 2071
TYPE P
YEAR 1974
AUTH CHENEY, D.P.; DYER, J.P. III;
TITL DEEP-WATER BENTHIC ALGAE OF THE FLORIDA MIDDLE GROUND.

BIBL MAR. BIOL. 27: 185-190.

KEYW BENTHIC ALGAE REEF
DIVERSITY SEASONALITY

ABST The composition and seasonality of the benthic algae of the Florida Middle Ground (an offshore area of extensive reef outcroppings, 25 to 60 m deep in the eastern Gulf of Mexico) were described. Ninety one algal species (92 taxa) were obtained, including 6 species newly reported for Florida and the eastern Gulf of Mexico. The flora predominantly tropical with Caribbean affinities. Marked seasonal differences in species diversity and abundance were present. An extensive or well-anchored holdfast system was a common feature of those species which appeared to be perennial.

ANNO

06/09/1987

.....
ACC 2072
TYPE P
YEAR 1974
AUTH CHESSER, S.A.;
TITL SEDIMENTS OF THE WEST FLORIDA SHELF.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW SEDIMENT DISTRIBUTION CARBONATE

ABST A total of 225 sediment samples from the west Florida shelf were analyzed to determine the distribution of sediment properties. Spatial trends in the distribution of sediment grain size are cited. Sand-sized sediments composed of quartz and carbonate are predominant. The carbonate fraction was determined to be mainly of biogenic origin.

ANNO

06/09/1987

.....
ACC 2393
TYPE P
YEAR 1969
AUTH CHESHER, R.H. ;
TITL CONTRIBUTIONS TO THE BIOLOGY OF MEOMA VENTRICOSA (ECHINOIDEA: SPATANGOIDA).

BIBL BULL. MAR. SCI. 19(1):72-110.

KEYW MONROE	BIOLOGY	GROWTH
BEHAVIOR	REPRODUCTION	COMMENSAL
SUBSTRATE	ECHINODERM	FEEDING HABIT
PARASITE		

ABST A 2-year study of the biology of the echinoid, *Meoma ventricosa* was conducted in Florida (Ft. Lauderdale to Key West), the Bahama Islands, Panama and Columbia. The habitat, behavior, food and feeding, growth, reproduction, predators, parasites, commensals, abnormalities, internal anatomy and substrate relations of *M. ventricosa* were examined.

ANNO

06/09/1987

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ACC 2394
TYPE P
YEAR 1973
AUTH CHESHER, R.H. (MARINE RES. FOUND., INC., KEY WEST, FL.);
TITL ENVIRONMENTAL ANALYSIS, CANALS AND QUARRIES--LOWER FLORIDA KEYS.

BIBL FOR CHARLEY TOPPINO & SONS, INC., ROCKLAND KEY, FL 162 P.

KEYW MONROE	STONE CRAB	SALINITY
TURBIDITY	DO	NUTRIENT
WATER QUALITY	SNAPPER	

ABST Water quality and biological community studies were conducted in man made canals and rock quarries in the lower Florida Keys. Fifteen year old dead-end and open-end canals at Summerland Key Cove were found to have excellent water quality and a diverse and abundant marine flora and fauna. The canal system had been utilized by residents for swimming, fishing, and boating. Four year old, 40 ft deep, rock quarries at Rockland Key, bordering shallow grass flats on the Gulf side exhibited a variety of marine fauna including jack, snapper, grunt, angelfish, barracuda, jewfish, Florida lobster, and stone crabs. It was concluded that, in addition to providing the public with substantially valuable construction fill, the rock quarries were a biological improvement in the area, and that damage (siltation) to the marine surroundings from 8 years of calcite mining was not evident.

ANNO

06/09/1987

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ACC 2505

TYPE P

YEAR 1969

AUTH CHEUNG, T.S.;

TITL THE ENVIRONMENTAL AND HORMONAL CONTROL OF GROWTH AND REPRODUCTION IN THE ADULT FEMALE STONE CRAB, MENIPPE MERCENARIA (SAY).

BIBL BIOL. BULL. MAR. BIOL. LAB., WOODS HOLE. 136(3):327-346.

KEYW DADE
GROWTH
SPAWNING

STONE CRAB
REPRODUCTION
SALINITY

SEASONAL
TEMPERATURE

ABST Female stone crabs were taken from Biscayne Bay, Florida between April 1965 and November 1967 and studied in the laboratory to determine the relationship between hormonal and seasonal changes on growth and reproduction. Results indicate spawning is affected by seasonal temperature and that summer molting may be inhibited by reproductive activity. Destalking experiments showed a cyclic change in the dominance of molting and spawning responses and a transitional period between the two. Postmolt destalking responses showed that spawning and ovarian development may be controlled by different hormones.

ANNO

06/09/1987

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ACC 353

TYPE

YEAR 1962

AUTH CHEW, F.;DRENNAN, K.L.;DEMORON, W.J.;

TITL ON THE TEMPERATURE FIELD EAST OF THE MISSISSIPPI DELTA.

BIBL J. GEOPHYS. RES. 67(1):271.

KEYW LOOP CURRENT
TEMPERATURE

PHYSICAL PROCESS
WATER MASS

SALINITY

ABST

ANNO

ACC 367

TYPE

YEAR 1976

AUTH CHITTENDEN, M.E.;MCEACHRAN, J.D.;

TITL COMPOSITION, ECOLOGY AND DYNAMICS OF DEMERSAL FISH COMMUNITIES ON THE NORTH WESTERN GULF OF MEXICO CONTINENTAL SHELF, WITH A SIMILAR SYNOPSIS OF THE ENTIRE GULF.

BIBL TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. SG-76-208. 104 P.

KEYW	BIOLOGY	ECOLOGY	FEEDING HABIT
	LIFE HISTORY	SHRIMP	DEMERSAL FISH
	BROWN SHRIMP	TEMPERATURE	BIOMASS
	POPULATION DYNAMICS		

ABST Micropogon undulatus and the family Sciaenidae are dominant on white shrimp grounds, while Stenotomus caprinus and the family Sparidae are primarily centered about brown shrimp grounds. The fish fauna are richer and of greater biomass on brown shrimp grounds. Fishes from the white shrimp grounds have a strong affinity for estuary environs, while fishes of the brown shrimp grounds are independent of estuaries. The ichthyofauna assemblage of the Gulf consists of four major demersal fish communities whose distribution is determined by sediment composition, salinity, topographic relief and temperature. Life history and population dynamics are described for each of 15 major fish species. The observations are primarily for off the Texas Coast and may possibly apply for the northeastern Gulf Coast.

ANNO

06/09/1987

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ACC 1080

TYPE

YEAR 1977

AUTH CHITTENDEN, M.E.; MOORE, D.;

TITL COMPOSITION OF THE ICHTHYOFAUNA INHABITING THE 110-M BATHYMETRIC CONTOUR OF
THE GULF OF MEXICO, MISSISSIPPI RIVER TO THE RIO GRANDE.

BIBL NORTHEAST GULF SCI. 1(2):106-114.

KEYW BIOLOGY
ZOOLOGY

FISH
DEPTH

SPECIES COMPOSITION
DISTRIBUTION

ABST

ANNO

06/09/1987

.....
ACC 4310

TYPE P

YEAR 1976

AUTH CHITTENDEN, M.E. JR.; MCEACHRAN, J.D.;

TITL COMPOSITION, ECOLOGY AND DYNAMICS OF DEMERSAL FISH COMMUNITIES ON THE NORTH WESTERN GULF OF MEXICO CONTINENTAL SHELF, WITH A SIMILAR SYNOPSIS FOR THE ENTIRE GULF.

BIBL REPORT TO NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, MD. OFC. OF SEA GRANT.

KEYW	ECOLOGY	DEMERSAL FISH	COMMUNITIES
	CONTINENTAL SHELF	SHRIMP	BIOMASS
	POPULATION DYNAMICS		

ABST Two major communities of demersal fishes are found over soft bottom on the continental shelf in the northwestern Gulf of Mexico inshore of the 91-m contour: (1) a white shrimp grounds community located at about 3.5-22 m, and (2) a brown shrimp grounds community located at about 22,091 m. The overall and seasonal compositions of these ichthyofaunas are described and their community ecology is discussed. The faunas of the two shrimp grounds were distinct at the family level except that a zone of faunal overlap occurred at 18-36 m. Relative biomass was much higher on the brown shrimp grounds than on the white shrimp grounds. Life histories and population dynamics are described for 15 species each of which made up 3 percent of the catch on a given shrimp grounds.

ANNO

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ACC 4170
 TYPE P
 YEAR 1982
 AUTH CHOI, D.R.;
 TITL COELOBITES REEF CAVITY DWELLERS AS INDICATORS OF ENVIRONMENTAL EFFECTS CAUSED BY OFFSHORE DRILLING.

BIBL BULL. MAR. SCI. 32(4):880-889.

KEYW OFFSHORE DRILLING	REEF	DRILLING MUD
CUTTING	STRESS	CORAL
BARIUM	IRON	

ABST The effects of oil-well drilling on coelobite communities (reef cavity dwellers) were evaluated 15 mo. after the completion of drilling the 2nd well at Matinloc Field, approximately 50 km west of Palawan Island in the Philippines. Drilling discharges (mud and/or cuttings with Fe flakes) were trapped in coral rubble cavities and stained the cavity wall brown. Staining was correlated with affected cavity-dwellers. Discharges accumulated in cavities and the underside of coral rubble up to a radius of 100 m from the well head. The coelobite community was largely disturbed within 40 m of the well site along north-south and east-west transects in 26 m depths. Minor changes in community structure were detected out to 75-100 m from the well site. The heavily damaged area coincided with the position of the drilling ship, where debris and Fe scraps were observed and drilling mud/cuttings had accumulated. The presence of Ba, clay and Fe flakes in trapped mud in rubble cavities suggested that the drilling mud and cuttings had stained the cavity wall and seriously affected the coelobite community. The visual effect of drilling on bottom surface dwellers (non-cavity dwellers) was less apparent. Coelobites could serve as sensitive indicators of environmental stress.

ANNO

06/09/1987

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ACC 369
TYPE
YEAR 1975
AUTH CHRISTMAS, J.Y.;WALLER, R.S.;
TITL LOCATION AND TIME OF MENHADEN SPAWNING IN THE GULF OF MEXICO.

BIBL GULF COAST RESEARCH LABORATORY, OCEAN SPRINGS, MS. 20 PP.

KEYW BIOLOGY	COMMERCIAL FISHERY	FISH LARVAE
HYDROGRAPHY	SALINITY	TEMPERATURE
FISH	SPAWNING	

ABST

ANNO

06/09/1987

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ACC 434

TYPE

YEAR 1982

AUTH CHRISTMAS, J.Y.;MCBEE, J.T.;WALLER, R.S.;SUTTER, F.C.;

TITL HABITAT SUITABILITY INDEX MODELS: GULF MENHADEN.

BIBL U.S. FISH AND WILDLIFE SERVICES, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS-OBS-82-10.23. 23 PP.

KEYW BIOLOGY

ECOLOGY

FISH

MANAGEMENT

RESOURCE

HABITAT

LIFE HISTORY

MODEL

FISHERY

ABST

ANNO

06/09/1987

.....
ACC 768

TYPE

YEAR 1981

AUTH CHRISTMAS, J.Y.;VAN DEVENDER, T.;

TITL PREDICTION OF SHRIMP LANDINGS FROM INVESTIGATIONS ON THE ABUNDANCE OF POST
LARVAL SHRIMP.

BIBL KUWAIT BULLETIN OF MARINE SCIENCE (2):301-310.

KEYW INVERTEBRATE
ECOLOGY
SHRIMP FISHERY

BIOLOGY
LIFE HISTORY
SHRIMP

COMMRCIAL FISHERY
SHELLFISH
LARVAE

ABST This report provides data and methodology on commercial shrimp resource management through the prediction of shrimp abundance. Shrimp post-larvae were sampled in the waters adjacent to Mississippi using plankton sampling gear. Estimates of the following shrimp season were made. Environmental factors known to effect the transition from post-larvae to adult are discussed.

ANNO

06/09/1987

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ACC 47
TYPE
YEAR 1982
AUTH CHUANG, W.S.;SCHROEDER, W.W.;WISEMAN, W.J.;
TITL SUMMER CURRENT OBSERVATIONS OFF THE ALABAMA COAST.

BIBL CONTRIB. MAR. SCI. 25:121-131.

KEYW	COASTAL ZONE	CONTINENTAL SHELF	CURRENTS
	HYDROGRAPHY	METEOROLOGY	PHYSICAL PROCESS
	SEA LEVEL	WIND	CIRCULATION

ABST Low-frequency current variability on the Alabama shelf is examined from three years (1976, 1978, and 1979) of summer current, sea level, and meteorological records. The analysis shows that the shelf water response to local wind forcing is frequency dependent; alongshore current and sea level are driven by the alongshore wind at time scales longer than a week, but they are generally not correlated at shorter periods. Since the mean wind varies between the three study seasons, a permanent summer circulation pattern does not exist. The variations in frequency response also indicate that circulation is strongly affected by the wind duration, density stratification, and coastal geometry.

ANNO

06/09/1987

.....
ACC 773
TYPE
YEAR 1919
AUTH CHURCHILL, E.P.;
TITL LIFE HISTORY OF THE BLUE CRAB.

BIBL BULL. BUR. FISH. 361(870):95-128.

KEYW DECAPOD	INVERTEBRATE	BIOLOGY
COMMERCIAL FISHERY	ECOLOGY	LIFE HISTORY
REPRODUCTION	BLUE CRAB	DISTRIBUTION
SPAWNING		

ABST This report discusses the life history of the blue crab, *Callinectes sapidus*. Habitat and distribution, morphological development, molting, general habits, sexual reproduction, winter habits, autotomy, mating, spawning experiments and number of batches of eggs laid are discussed.

ANNO

06/09/1987

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ACC 426

TYPE

YEAR 1982

AUTH CLAPP, R.B.;BANKS, R.C.;MORGAN-JACOBS, D.;HOFFMAN, W.A.;

TITL MARINE BIRDS OF THE SOUTHEASTERN GULF OF MEXICO. PART 1. GAVIIFORMES THROUGH PELECANIFORMES.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, DC. FWS-OBS-82-01. 637 P.

KEYW AVES

BIOLOGY

EXPLORATION

INDUSSTRY

LIFE HISTORY

OIL

SPECIES COMPOSITOIN

BIRD

BIBLIOGRAPHY

ABST

ANNO

06/09/1987

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ACC 427

TYPE

YEAR 1982

AUTH CLAPP, R.B.;MORGAN-JACOBS, D.;BANKS, R.C.;

TITL MARINE BIRDS OF THE SOUTHEASTERN UNITED STATES AND GULF OF MEXICO. PART 2.
ANSERIFORMES.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS-OBS-82-20. 491 PP.

KEYW AVES

EXPLORATION

LIFE HISTORY

OIL INDUSTRY

OIL

SPECIES COMPOSITION

BIRD

BIBLIOGRAPHY

ABST

ANNO

06/09/1987

.....

ACC 428

TYPE

YEAR 1983

AUTH CLAPP, R.B.;MORGAN-JACOBS, D.;BANKS, R.C.;

TITL MARINE BIRDS OF THE SOUTHEASTERN UNITED STATES AND GULF OF MEXICO. PART 3.
CHARADRIIFORMES.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
DC. FWS-OBS-83-30. 850 P.

KEYW AVES

BIOLOGY

EXPLORATION

INDUSTRY

LIFE HISTORY

OIL

SPECIES COMPOSITION

BIBLIOGRAPHY

BIRD

ABST

ANNO

06/09/1987

.....
ACC 435

TYPE

YEAR 1981

AUTH CLARKE, D.G.;HORSTMANN, H.L.;

TITL FEEDING HABITS AND FOOD OF THE FISHES OF MISSISSIPPI SOUND AND ADJACENT COA
STAL AREAS; A BIBLIOGRAPHY WITH ABSTRACTS.

BIBL U.S. ARMY CORPS OF ENGINEERS, WATERWAYS EXPERIMENT STATION, VICKSBURG, MS.
MISCELLANEOUS PAPER EL-81-11.

KEYW BIBLIOGRAPHY BIOLOGY FEEDING HABIT
FISH

ABST

ANNO

06/09/1987

.....

ACC 821
TYPE
YEAR UNKN
AUTH CLARKE, D.;
TITL UNKNOWN.

BIBL PH.D. DISSERTATION. 110 P.

KEYW	DEMERSAL FISH	SALINITY	TEMPERATURE
	FEEDING HABIT	LENGTH	WEIGHT
	BEHAVIOR		

ABST The freckled blenny, *Hypsoblennius ionthas*, was studied over a three year period at Dauphin Island, Alabama. Fish were identified, measured, weighed and examined for stomach contents. Temperature and salinity data at time of capture were taken. Trophic studies of niche width and overlap were examined. Laboratory experiments were conducted to determine the effects of population density and food abundance. Effects of sexual behavior and social dominance were observed.

ANNO

06/09/1987

.....
ACC 2290
TYPE P
YEAR 1980
AUTH CLARKE, A.R;
TITL CONTRIBUTIONS TO THE LIFE HISTORIES OF SEVERAL SHRIMPS FROM TWO STATIONS IN
SARASOTA BAY.

BIBL BACHELOR'S THESIS. NEW COLLEGE OF THE UNIVERSITY OF SOUTH FLORIDA,
TAMPA, FL.

KEYW SARASOTA	SEAGRASS	DISTRIBUTION
ABUNDANCE	SHRIMP	TEMPERATURE
SALINITY	DO	PINK SHRIMP

ABST Monthly trawls on two seagrass (*Thalassia testudnum*) flats in Sarasota Bay, Florida yielded 7,192 shrimps, representing 17 species. Six species (*Penaeus duorarum*, *Periclinenues longicaudatus*, *Hippolyte* sp., *Tozeuna carolinensis*, *Ambidexter symmetricus*, *Palaemonetes pugio*) comprised 97.5% of the total catch. Information on the distribution, abundance, and seasonal characteristics of the shrimp populations is presented.

ANNO

06/09/1987

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ACC 926
TYPE
YEAR 1977
AUTH COASTAL ENVIRONMENTS INC.;
TITL CULTURAL RESOURCES EVALUATION OF THE NORTHERN GULF OF MEXICO CONTINENTAL SHELF. VOLUME I. PREHISTORIC CULTURAL RESOURCE POTENTIAL.

BIBL NATIONAL PARK SERVICE, OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION,
INTERAGENCY ARCHAEOLOGICAL SERVICES, WASHINGTON, DC. 361 P.
KEYW CONTINENTAL SHELF RESOURCE DISTRIBUTION
GEOMORPHOLOGY

ABST This is a study of the predictability of drowned prehistoric habitation sites in the continental shelf area, northern Gulf of Mexico, from the Rio Grande River to the Florida Keys. Because of the difficulties of obtaining data concerning the location of a submerged site, an indirect approach was formulated incorporating the limitations of the detection devices that are available. A method is presented of forming hypotheses about the nature of the archeological possibilities of the OCS - hypotheses that can be tested with the limited sort of data that can presently be gathered from the OCS. The method is this: the OCS will be divided into Eastern, Central, and Western Gulf areas, corresponding to the adjacent areas on land. The archeological literature of the land areas will be reviewed to identify major cultural manifestations, by time and by type. These can be predicted to have occurred similarly on the OCS in the time periods when and where it was exposed concurrently. These cultural manifestations are examined for the purpose of making tables of index artifacts, environmental-use models, and particularly landforms favored for habitation sites. Then, addressing the problem of increasing one's chances in site prospecting in the OCS: the landforms (detectable, as relicts) that are most frequently favored at any period are assigned a list of "signatures" - discrete site indicators that are capable of being detected by the limited sensing tools and techniques available for OCS survey. An inventory is made of the known sites in the Northern Gulf area that were occupied from 55,000 B.P. to 3,500 B.P. Typical sites from three

ANNO

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ACC 927
TYPE
YEAR 1977
AUTH COASTAL ENVIRONMENTS INC. ;
TITL CULTURAL RESOURCES EVALUATION OF THE NORTHERN GULF OF MEXICO CONTINENTAL SHELF. VOLUME II. HISTORICAL CULTURAL RESOURCES.

BIBL NATIONAL PARK SERVICE, OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION,
INTERAGENCY ARCHAEOLOGICAL SERVICES, WASHINGTON, DC. 171 P.
KEYW CONTINENTAL SHELF RESOURCE DISTRIBUTION
SHIPWRECK

ABST A study of the occurrence of shipwrecks and related artifacts was conducted for the continental shelf area, northern Gulf of Mexico, from the Rio Grande River to the Florida Keys. The period of consideration extended from 1500 A.D. through 1945 A.D. Published and unpublished reports of losses and locations of known wrecks were utilized along with charts and maps. From this data, a listing of 1,904 reported losses and/or known wrecks was compiled, with a basic data sheet for each wreck. It is estimated that the total number of significant wrecks in the study area is between 2,500 and 3,000. Of the total shipwreck population, approximately 70 percent date from the 19th and 20th centuries. The remaining 30 percent, the wrecks from the 16th, 17th, and some from the 18th century, offer data which, unlike the information from more recent wrecks, may be unavailable from any other source. It is estimated that approximately two-thirds of the total number of wrecks in the northern Gulf are within 1.5 kilometers of the coast. Another 500 wrecks probably lie between the 1.5-kilometer and 10-kilometer line. For the most part, wrecks are associated with approaches to seaports, straits, shoals, or reefs and along well established sailing routes. Current techniques employed in subaqueous cultural resource surveys are discussed and evaluated. These include remote-sensing tools such as magnetometers, side-scan sonars, and sub-bottom profilers. Recommendations for intensity of survey effort in the study area are made in a companion map volume. Zones are identified based on probability of culture resource occurrence, and intensity of survey effort.

ANNO

06/09/1987

.....
ACC 2073
TYPE P
YEAR 1971
AUTH COBB, S.P.;
TITL BIOLOGY OF THE ROCK SHRIMP SICYONIA BREVIROSTRIS.

BIBL MASTER'S THESIS. UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL.

KEYW BIOLOGY	ROCK SHRIMP	HOURGLASS
HYDROGRAPHIC	DEVELOPMENT	SPAWNING
MOLLUSC	DECAPOD	CRUSTACEAN

ABST Rock shrimp were collected and studied during Project Hourglass, along the West Florida continental shelf. The distribution of *Sicyonia brevirostris* was found to be related to the substratum and hydrographic properties with the greatest abundance at the 37 m stations. The greatest population density occurred from July through November, with fluctuation all year. The reproductive biology of *S. brevirostris* was examined, and information on ovarian development, spawning, size at first sexual maturity, and sex ratio were reported. *S. brevirostris* was found to feed primarily on molluscs and decapod crustaceans and may be considered a generalized carnivore. The feeding activity appeared to be nocturnal occurring throughout the year. No economically important concentrations of *S. brevirostris* were located in the study area.

ANNO

06/09/1987

.....
ACC 2074
TYPE P
YEAR 1973
AUTH COBB, S.P.; FUTCH, C.R.; & CAMP, D.K.;
TITL THE ROCK SHRIMP, SICYONIA BREVIROSTRIS, STIMPSON, 1871 (DECAPODA: PENAEIDAE
) . MEM. HOURGLASS CRUISES.

BIBL FLA. DEPT. NAT. RESOURCES MAR. RESEARCH LAB. III(1):38.

KEYW ROCK SHRIMP	DEVELOPMENT	SPAWNING
RECRUITMENT	DISTRIBUTION	SUBSTRATE
HYDROGRAPHIC	TEMPERATURE	SALINITY
TURBIDITY		

ABST An ecological analysis of rock shrimp collected in the Eastern Gulf of Mexico was conducted and existing knowledge of the species was synthesized. A total of 973 rock shrimp were weighed, measured, sexed and examined for morphological variation. Ovarian development, spawning, recruitment, sex ratio, and size at first sexual maturity were determined. The distribution was found to be related to substrate and hydrographic properties, and the greatest abundance was found at 37m stations. The population density fluctuates seasonally, being greatest from July through November. *Sicyonia brevirostris* was found to feed primarily on molluscs and crustaceans nocturnally throughout the year.

ANNO

06/09/1987

.....
ACC 592
TYPE
YEAR 1981
AUTH COLEMAN, J.M.;PRIOR, D.B.;
TITL DELTAIC ENVIRONMENTS OF DEPOSITION.

BIBL AM. ASSOC. PETRO. GEOL. BULL. 65:139-177.

KEYW COASTAL WATER DEPOSITION GEOLOGY
 SEDIMENT FACIES SEDIMENT STRUCTURE SEDIMENTATION
 SEDIMENT

ABST Delta environments have a wide variety of individual depositional facies within the overall delta sequence. This complexity results from the following factors: (a) modern deltas exist in a wide range of geographic settings, ranging in climatic regimes from arctic to temperate to tropical to arid, with basin tectonics ranging from rather stable basins to extremely active subsiding basins; (b) deltas form primarily in the zone of interaction between freshwater and marine processes, one of the most complex process settings in all coastal environments; (c) deltas carry large volumes of sediment, ranging in grain size from gravel to clay, and deposit these sediments both overbank and into the marine environment through distributory channels; (d) rapid rates of deposition often result in formation of extremely weak foundations, with a wide variety of massmovement processes resulting in complex redistribution of the deltaic sediment. Thus sand bodies within deltas display a variety of geometries and vertical-sequence characteristics. The complexity of environmental settings under which deltas exist results in a variety of vertical sequences that can form within the delta facies. Delta types range from river dominated to tide dominated and wave-current dominated (Coleman, 1976). From the standpoint of petroleum accumulation, however, river- and tide-dominated deltas are probably the most important. In these two delta settings, reservoir-quality rocks are often deposited in close proximity to potential source beds, contemporaneous structures which form major trapping potentials in common, and most deltas exist in rapidly subsiding

ANNO

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ACC 899
TYPE
YEAR N/AE
AUTH COLE, T.J.;
TITL OSMATIC AND IONIC REGULATORY ABILITIES OF UCA MINAX IN RELATION TO ITS ECOLOGY.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 95 PP.

KEYW FLORIDA	GOVERNOR'S BAYOU	PENSACOLA
THOMPSON'S BAYOU	AIR TEMPERATURE	BENTHIC FAUNA
CALCIUM	CHLORINE COMPOUNDS	MAGNESIUM
POTASSIUM	SEDIMENT TEXTURE	SED

ABST The osmotic and ionic regulatory abilities of the fiddler crab *Uca minax* were studied in relation to their ecology. Field and laboratory concentrations of Na, K, Mg, Ca and Cl, were measured in external water and the internal blood serum levels of *Uca minax* under various temperature and salinity regimes.

ANNO

06/09/1987

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ACC 789

TYPE

YEAR 1973

AUTH COLLARD, S.B.;D'ASARO, C.N.;

TITL BENTHIC INVERTEBRATES OF THE EASTERN GULF OF MEXICO.

IN: J.I. JONES, R.E. RING, M.O. RINKEL, AND R.E. SMITH, EDS.

A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBURG, FL.

KEYW BENTHIC COMMUNITY	BENTHIC FAUNA	BIOLOGY
COMMUNITY STRUCTURE	ECOLOGY	TAXONOMY
INVERTEBRATE	ZOOGEOGRAPHY	

ABST Present knowledge of the biology and zoogeography of benthic invertebrates in the Gulf of Mexico is substantially greater than it was two decades ago (as summarized in monographs edited by Hedgepeth, 1953; Galtsoff, 1954. Since then, however, no comprehensive accounts of eastern Gulf benthos have been published, and the extensive literature remains widely scattered. The present account briefly summarizes the major scientific contributions of the past twenty years in benthic invertebrate studies in the eastern Gulf. Emphasis has been placed on the major non-commercial macroinvertebrate taxa since these groups are best known and are frequently diagnostic of faunal areas and community structure. Wide ranging commercially important forms such as penaeid species and Callinectes sapidus are reviewed elsewhere in this report.

ANNO

06/09/1987

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ACC 4018
TYPE P
YEAR 1984
AUTH COLLINS, LA.; FINUCANE, J.H.;
TITL ICHTHYOPLANKTON SURVEY, ESTUARINE AND INSHORE WATERS OF THE FLORIDA EVERGLADES, MAY 1971 TO FEBRUARY 1971.

BIBL NOAA TECH. REP. NMFS 6:1-75.

KEYW BIOLOGY	COASTAL	FISH
ICHTHYOPLANKTON	REDFISH	RECRUITMENT
SEA TROUT	ZOOPLANKTON	SPAWNING AREA
FISH EGG	LARVAE	

ABST Quarterly ichthyoplankton sampling was conducted at 16 estuarine and 24 inshore stations along the Florida Everglades from May 1971 to February 1972. The area is one of the most pristine along the Florida coast. The survey provided the first comprehensive information on seasonal occurrence, abundance (under 10 sq. meters of surface area), and distribution of fish eggs and larvae in this area. A total of 209,462 fish eggs and 78,865 larvae was collected. Eggs were identified only as fish eggs, but among the larvae, 37 families, 47 genera, and 37 species were identified. Abundance of eggs and larvae and diversity of larvae were greatest in the inshore zone. The 10 most abundant fish families which together made up 90.7% of all larvae from the study area were, in descending order of abundance: Clupeidae, Engraulidae, Gobiidae, Sciaenidae, Carangidae, Pomadasysidae, Cynoglossidae, Gerreidae, Triglidae, and Soleidae. Clupeidae, Engraulidae, and Gobiidae made up 59.9% of all larvae. The inshore zone (to a depth of about 10 m) was a spawning ground and nursery for many fishes important to fisheries. The catch of small larvae (less than or equal to 3.5 mm SL) indicated that most fishes identified from the 10 most abundant families spawned throughout the inshore zone at depths of less than or equal to 10 m, but *Orthopristis chrysoptera*, Gerreidae and *Prionotus* spp. spawned at depths of greater than or equal to 10 m, with offshore to inshore (eastward) larval transport. Salinity was one of several environmental factors that probably limited the numbers of eggs and larvae in the estuarine zone. Abundance of eggs and larvae

ANNO

06/09/1987

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ACC 2009
TYPE P
YEAR 1960
AUTH COMMERCIAL FISHERIES REVIEW;
TITL CALICO SCALLOP FISHERY IN FLORIDA.

BIBL COMM. FISH. REV. 22(12):41-43.

KEYW FISHERY	CALICO SCALLOP	FISHING GEAR
BIOLOGY	MOLLUSC	

ABST The early development of the calico scallop fishery in Florida is discussed , including location of scallop beds, catch rates, and fishing gear and methods. The most extensive beds are located in 1960 off the east coast from Daytona Beach to Ft. Pierce in 60 to 192 feet of water. Other beds were found off Cape San Blas on the west coast in 1957. The initiation of research on the biology of the calico scallop, Pecten (Argopecten) gibbus, at the Bureau of Commercial Fisheries Gulf Breeze Biological Laboratory is noted.

ANNO

06/09/1987

.....
ACC 833
TYPE
YEAR 1976
AUTH CONKLIN, P.J.;
TITL THE SIGNIFICANCE OF MICROALGAE IN THE ESTUARINE SYSTEM.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 70 PP.

KEYW AMMONIA	CARBON	DISSOLVED OXYGEN
INORGANIC COMPOUND	LIGHT INTENSITY	NITRATE
ORTHOPHOSPHATE	ALGAE	PRIMARY PRODUCTIVITY
ESTUARY		

ABST Various environmental factors were correlated with primary productivity according to size of the primary producers. Photosynthetic rates were measured by C14 uptake of samples divided into size fractions of above 20 microns, 10 20 microns, and .45 10 microns in an effort to describe the significance of micro algae in the estuarine systems. The study was conducted from December 1974 to September 1975.

ANNO

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ACC 4167
TYPE P
YEAR 1984
AUTH CONKLIN, P.J.;RANGA, R.K.;
TITL COMPARATIVE TOXICITY OF OFFSHORE AND OIL-ADDED DRILLING MUDS TO LARVAE OF T
HE GRASS SHRIMP PALAEMONETES INTERMEDIUS.

BIBL ARCH. ENVIRON. CONTAM. TOXICOL. 13(6):685-690.

KEYW DRILLING MUD	SHRIMP	PHYSIOLOGY
CRUSTACEAN	PATHOLOGY	BIOASSAY
DRILLING FLUID		

ABST Offshore drilling fluids (muds) varied widely in their toxicity to grass shrimp (*P. intermedius*) larvae. The 96 h LC50 for the 11 drilling muds ranged from 142- > 100,000 ppm (μ l/l). There was a significant correlation between oil content of the drilling muds and their toxicity. Addition of diesel oil (No. 2 fuel oil) or mineral oil to offshore drilling mud having a low oil content or to oil-free synthetic drilling mud led to a marked increase in the toxicity of these muds. Much of the toxicity of the offshore drilling muds was attributed to the oil content.

ANNO

06/09/1987

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ACC 2258
TYPE P
YEAR 1977
AUTH CONNER, W. ;
TITL RESPONSE OF A SOFT BOTTOM ECOSYSTEM TO PHYSICAL PERTURBATION.

BIBL PH.D. DISSERTATION. UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL.

KEYW INVERTEBRATE	BIOMASS	SEDIMENT
INFAUNA	DREDGING	STRESS

ABST To evaluate the effects of shell dredging on a soft bottom ecosystem, both dredged and undisturbed control areas were intensively sampled. The immediate biological effects of dredging were reductions in number of species, densities of invertebrates, and biomass. One year after dredging there was essentially no difference between control and experimental areas in sediment type, densities of invertebrates, species composition, or biomass.

ANNO

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ACC 2259
 TYPE P
 YEAR 1979
 AUTH CONNER, W.G.;SIMON, J.L.;
 TITL THE EFFECTS OF OYSTER SHELL DREDGING ON AN ESTUARINE BENTHIC COMMUNITY.

BIBL ESTUAR. COAST. MAR. SCI. 9:749-758.

KEYW BENTHIC	COMMUNITY	INFAUNA
INVERTEBRATE	BIOMASS	SEDIMENT
DREDGING	STRESS	ESTUARY

ABST The extent and nature of the effects on the benthos of physical disruptions associated with dredging fossil oyster shell was described. Two dredged areas and one undisturbed control area in Tampa Bay, Florida were quantitatively sampled before dredging and for one year after dredging. The immediate effects of dredging on the soft-bottom community were reductions in number of species (40% loss), densities of macroinfauna (65% loss), and total biomass of invertebrates (90% loss). During months 6-12 after dredging, the data (Mann-Whitney U Test, $\alpha=0.05$) showed no difference between dredged and control areas in number of species, densities or biomass (with one exception). Community overlap (Czeckanowski's coefficient) between dredged and control areas was reduced directly after dredging, but after 6 months the predredging level of similarity was regained.

ANNO

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ACC 2291

TYPE P

YEAR 1974

AUTH CONNERS, E.;

TITL THE EFFECTS OF A DOMESTIC SEWAGE OUTFALL ON THE DISTRIBUTION AND ABUNDANCE
OF MARINE BENTHIC POLYCHAETA AND MOLLUSCA, WITH COMMENTS ON CONTINUA AND
COMMUNITY STRUCTURE.

BIBL SENIOR THESIS. NEW COLLEGE OF UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL.
58 P.

KEYW SARASOTA

POLYCHAETE

MOLLUSC

SEDIMENT

ASSEMBLAGE

TEMPERATURE

SALINITY

DO

WATER QUALITY

POLLUTION

ABST The differences existing in the composition of shallow water marine benthic polychaete and molluscan faunas between areas in the vicinity of an outfall of secondary treated domestic sewage and areas beyond the peripheral zone of enrichment were assessed. Fewer species, lower diversities, and dominance by deposit feeders was observed near the sewage outfall. No direct changes in the particle size distribution or organic content of the sediments was attributable to the sewage outfall. The structure of the benthic faunas revealed that there were no functional assemblages of organisms, only statistical nodes abstracted from continuous distributions of individual species.

ANNO

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ACC 2321
TYPE P
YEAR 1972
AUTH CONNELL ASSOCIATES, INC.
TITL ENVIRONMENTAL ASSESSMENT STUDY-PUNTA GORDA AREA.

BIBL PROJECT 1079-PREPARED FOR PUNTA GORDA ISLAES, INC. PUNTA GORDA, FLORIDA.

KEYW CHARLOTTE	PHYSICAL	CHEMICAL
BIOLOGICAL	MODEL	DIVERSITY
BENTHIC	TEMPERATURE	SALINITY
DO	TURBIDITY	NUTRIENT

ABST A comprehensive survey was conducted to assess the physical, chemical, and biological aspects of Punta Gorda Isles canal system and surrounding area. The dynamic behavior of the canals was determined through a combination of field measurements and computer mathematical modeling. It was concluded that lack of mixing and flushing are not serious problems within the canal system. Chemical characteristics were determined in the canal system and adjacent waters were determined. Biological studies consisted of microbiological measurements, plankton studies, larvae studies, and benthic studies. Large quantities of bacteria were found in the harbor and canal system. These were believed to be derived from overflow of the nearby municipal sewage system. Low diversity indices of the benthos for the harbor were found. A table of benthic animals found at 4 stations was provided.

ANNO

06/09/1987

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ACC 2321
TYPE P
YEAR 1972
AUTH CONNELL ASSOCIATES, INC.
TITL ENVIRONMENTAL ASSESSMENT STUDY-PUNTA GORDA AREA.

BIBL PROJECT 1079-PREPARED FOR PUNTA GORDA ISLAES, INC. PUNTA GORDA, FLORIDA.

KEYW CHARLOTTE	PHYSICAL	CHEMICAL
BIOLOGICAL	MODEL	DIVERSITY
BENTHIC	TEMPERATURE	SALINITY
DO	TURBIDITY	NUTRIENT

ABST A comprehensive survey was conducted to assess the physical, chemical, and biological aspects of Punta Gorda Isles canal system and surrounding area. The dynamic behavior of the canals was determined through a combination of field measurements and computer mathematical modeling. It was concluded that lack of mixing and flushing are not serious problems within the canal system. Chemical characteristics were determined in the canal system and adjacent waters were determined. Biological studies consisted of microbiological measurements, plankton studies, larvae studies, and benthic studies. Large quantities of bacteria were found in the harbor and canal system. These were believed to be derived from overflow of the nearby municipal sewage system. Low diversity indices of the benthos for the harbor were found. A table of benthic animals found at 4 stations was provided.

ANNO

06/09/1987

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ACC 141
TYPE
YEAR 1981
AUTH CONTINENTAL SHELF ASSOCIATES, INC.;
TITL PRE-DRILLING SITE SPECIFIC BENTHIC SURVEY WITHIN STATE OF ALABAMA OIL AND GAS LEASE TRACT 112.

BIBL CONTINENTAL SHELF ASSOCIATES, INC., TEQUESTA, FL. 51 PP.

KEYW BENTHIC COMMUNITY	BIOLOGY	CONTINENTAL SHELF
SURVEY	EPIBOTA	ABUNDANCE
DISTRIBUTION		

ABST The purpose of this survey was to document the general abundance and distribution of the benthic epibiota (plants and animals living on the sediment), benthic macroinfauna (animals living within the sediment), and fishes in the vicinity (330 meters) of a proposed drillsite within State of Alabama Oil and Gas Tract 112. Due to the fact that the specific drillsite area had not previously been biologically sampled, it was important to document whether any unique or significant biological assemblages were present. The avifauna of the Alabama coastal region is also described within this report from the available literature and personal communications. In addition, projected impacts on resident and migrant bird species attributed to offshore exploratory oil and gas operations are discussed.

ANNO

06/09/1987

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ACC 704

TYPE

YEAR 1982

AUTH CONTINENTAL SHELF ASSOCIATES, INC.;

TITL STUDY OF THE EFFECT OF OIL AND GAS ACTIVITIES ON REEF FISH POPULATIONS IN T
HE GULF OF MEXICO OCS AREA. EXECUTIVE SUMMARY.

BIBL CONTINENTAL SHELF ASSOCIATES, INC., TEQUESTA, FL. 14 PP.

KEYW ARTIFICIAL REEF
DRILLING RIG

BIOLOGY
FISHERY

COASTAL WATER

ABST

ANNO

06/09/1987

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ACC 2075
TYPE U
YEAR 1980
AUTH CONTINENTAL SHELF ASSOCIATES, INC.;
TITL LIVE BOTTOM SURVEY, CHARLOTTE HARBOR BLOCKS 144 AND 145.

BIBL UNPUBL. TECHNICAL REPORT, CONTINENTAL SHELF ASSOCIATES, TEQUESTA, FL.

KEYW LIVE BOTTOM	PHOTODOCUMENTATION	SUBSTRATE
EPIBIOTA	SURVEY	REMOTE SENSING

ABST A live (hard) bottom site clearance survey of two oil and gas lease blocks in the eastern Gulf of Mexico was conducted using videotape and still photographic documentation of the substrate and epibiota.

ANNO

06/09/1987

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ACC 2076
TYPE U
YEAR 1980
AUTH CONTINENTAL SHELF ASSOCIATES, INC.;
TITL LIVE BOTTOM SURVEY OF CHARLOTTE HARBOR BLOCKS 188 AND 231.

BIBL UNPUBL. TECHNICAL REPORT, CONTINENTAL SHELF ASSOCIATES, TEQUESTA, FL.

KEYW LIVE BOTTOM	SUBSTRATE	EPIBIOTA
SURVEY	PHOTODOCUMENTATION	REMOTE SENSING

ABST Two oil and gas lease blocks in the eastern Gulf of Mexico were surveyed before drilling. Representative samples of the live (hard) bottom biota were collected, and television and still camera surveys of the substrate and epibiota were documented.

ANNO

06/09/1987

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ACC 2077
TYPE U
YEAR 1981
AUTH CONTINENTAL SHELF ASSOCIATES, INC. ;
TITL PRE- AND POST-EXPLORATORY DRILLING LIVE BOTTOM BIOLOGICAL ASSESSMENT, CHARL
OTTE HARBOR AREA, BLOCK 144, LEASE OCS-G-3906. WELL NO. 1.

BIBL UNPUBL. TECHNICAL REPORT, CONTINENTAL SHELF ASSOCIATES, TEQUESTA, FL.

KEYW LIVE BOTTOM DRILLING MUD PHOTODOCUMENTATION
 REMOTE SENSING STRESS SURVEY

ABST Underwater television and still camera surveys of a live bottom area surro
 unding a drill site in the eastern Gulf of Mexico were conducted before and
 after drilling operations. This environmental assessment was necessary to
 satisfy USGS environmental stipulations for bulk drilling mud discharges.

ANNO

06/09/1987

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ACC 2078
TYPE U
YEAR 1981
AUTH CONTINENTAL SHELF ASSOCIATES, INC.;
TITL GROUND TRUTH SURVEY OF CHARLOTTE HARBOR BLOCK 715.

BIBL PREPARED FOR JOHN CHANCE & ASSOC. UNPUBL. TECHNICAL REPORT, CONTINENTAL
SHELF ASSOCIATES, TEQUESTA, FL.
KEYW SIDE SCAN SONAR PHOTODOCUMENTATION REMOTE SENSING
SURVEY

ABST An underwater television and still camera survey was conducted near a propo
sed drill site in Charlotte Harbor block 715 off the Florida west coast to
ground truth certain side scan sonar signatures previously detected during
a geographical survey for shallow hazards.

ANNO

06/09/1987

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ACC 2079

TYPE U

YEAR 1981

AUTH CONTINENTAL SHELF ASSOCIATES, INC.;

TITL SURVEY OF POTENTIAL LIVE BOTTOM AREAS, VERNON AREA BLOCK 654; LIVE BOTTOM SURVEY THE ELBOW BLOW 915; SURVEY OF POTENTIAL LIVE BOTTOM AREAS IN THE ELBOW BLOCKS 565 AND 566 OFF THE WEST COAST OF FLORIDA; AND SURVEY OF POTENTIAL LIVE BOTTOM AREAS IN TARPON SPRINGS BLOCK 277 OFF THE WESTERN COAST OF FLORIDA.

BIBL UNPUBL. TECHNICAL REPORT, CONTINENTAL SHELF ASSOCIATES, TEQUESTA, FL.

KEYW LIVE BOTTOM

SUBSTRATE

EPIBIOTA

PHOTODOCUMENTATION

REMOTE SENSING

SURVEY

ABST Site clearance surveys of five oil and gas lease blocks in the eastern Gulf of Mexico were conducted. The live (hard) bottom substrate and its epibionts were documented by underwater television and still camera, biological sample collection and analyses.

ANNO

06/09/1987

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ACC 2080
TYPE U
YEAR 1981
AUTH CONTINENTAL SHELF ASSOCIATES, INC.;
TITL SURVEY OF POTENTIAL LIVE BOTTOM AREAS IN DESTINDOME BLOCKS 562 AND 563 OFF
THE WESTERN COAST OF FLORIDA.

BIBL UNPUBL. TECHNICAL REPORT, CONTINENTAL SHELF ASSOCIATES, TEQUESTA, FL.

KEYW LIVE BOTTOM	SUBSTRATE	EPIBIOTA
BIOLOGICAL	CHEMICAL	PHOTODOCUMENTATION
REMOTE SENSING		

ABST A live (hard) bottom site clearance survey of two oil and gas lease blocks in the eastern Gulf of Mexico was conducted using underwater television and still photographic documentation of the substrate and epibiota. In addition, biological specimens were collected and chemical parameters were measured.

ANNO

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ACC 4019
 TYPE P
 YEAR 1985
 AUTH CONTINENTAL SHELF ASSOCIATES, INC.;
 TITL SOUTHWEST FLORIDA SHELF REGIONAL BIOLOGICAL COMMUNITIES SURVEY MARINE HABIT
 AT ATLAS.

BIBL PREPARED FOR THE U.S. DEPARTMENT OF INTERIOR, MINERALS MANAGEMENT SERVICE,
 GULF OF MEXICO OCS REGION, METAIRIE, LA. CONT. #14-12-0001-29036. 2 VOL.

KEYW BIOLOGY	BENTHIC	BATHYMETRY
CONTINENTAL SHELF	EPIBIOTA	GEOPHYSICAL
SIDE SCAN SONAR	BASELINE STUDY	HABITAT
SWFLA	GEOLOGY	

ABST As part of a third year of environmental baseline studies of the southwest Florida shelf funded by the Minerals Management Service, broad-scale mapping of benthic habitats was conducted. An Atlas was produced to supplement one produced earlier. During earlier studies, habitat had been mapped along five east-west transects extending from 20 to 200 m and one north-south transect in a water depth of 80 to 130 m. During the Year 3 study, three of the east-west transects were extended inshore of the 20-m isobath and six north-south transects were added: one in 10 to 20 m depth, four in approximately 50 m depth, and one in 100 to 170 m depth. In addition, a unique area along one of the previously surveyed transects was surveyed again. Mapping was conducted using a combination of geophysical equipment (side-scan sonar, subbottom profiler, precision fathometer) and remote photographic instrumentation (black-and-white television camera and color 35-mm still camera both mounted on a towed sled). Substrates and geological features were delineated through interpretation of videotapes, photographs, and geophysical records. Benthic habitats were categorized on the basis of conspicuous epibiota seen in the videotapes and photographs. Results were compiled into a two-volume Marine Habitat Atlas. Volume I contains 23 maps at a scale of 1:48,000 and several index maps at a scale of 1:50,000. Volume II contains descriptions of methodology and a brief discussion of the results.

ANNO

06/09/1987

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ACC 4020

TYPE P

YEAR 1985

AUTH CONTINENTAL SHELF ASSOCIATES, INC.;

TITL AN ANALYSIS OF UNDERWATER VIDEOTAPE AND STILL PHOTOGRAPHIC DATA FROM CHARLOTTE HARBOR AREA BLOCKS 622, 623, 667, AND 711.

BIBL A REPORT FOR SHELL OFFSHORE INC., NEW ORLEANS, LA. 32 P.

KEYW LIVE BOTTOM
EPIBIOTA

BENTHIC
PHOTODOCUMENTATION

BIOLOGY

ABST Videotapes and still photographs from a live-bottom photodocumentation survey of four lease blocks in the Charlotte Harbor Area were reviewed and interpreted. Three bottom types were recognized: sand bottom, rock outcrops, and coralline algal nodule bottom. Areas of coralline algal nodule bottom were mapped and categorized as high, medium, or low in density. The incidence of coralline algal nodule bottom was 176% in Block 622, 94% in Block 623, and 100% in Blocks 677 and 711. The epibiota was similar to that previously described for nearby areas surveyed during the MMS Southwest Florida Shelf Ecosystem Study.

ANNO

06/09/1987

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ACC 4021
TYPE P
YEAR 1983
AUTH CONTINENTAL SHELF ASSOCIATES, INC. ;
TITL LIVE BOTTOM SURVEY, AREA OF POTENTIAL DRILLSITE LOCATIONS IN CHARLOTTE HARB
OR AREA BLOCK 887 OFF THE WEST COAST OF FLORIDA.

BIBL A REPORT FOR SHELL OFFSHORE INC., NEW ORLEANS, LA. 36 P.

KEYW LIVE BOTTOM	INVERTEBRATE	DEMERSAL FISH
BIOLOGY	BENTHIC	EPIBIOTA
PHOTODOCUMENTATION		

ABST In accordance with MMS stipulations for anticipated exploratory drilling in offshore oil and gas lease blocks, a photodocumentation survey was conducted in Charlotte Harbor Area Block 887 off the southwest coast of Florida. The survey included dredge and trawl sampling and remote photography using a towed underwater television and still camera system. Water depth in the area was 65 to 70 m, and the substratum consisted of a veneer of rubble-strawn sand overlying hard bottom. The thickness of the sand veneer ranged from less than 1 m to 10 m (average 2.5 m). Dredge and trawl sampling resulted in the collection of 140 species, including 39 species of crustaceans, 21 of sponges, and 20 of algae. The dominant biota in terms of percent cover was the green alga *Codium isthmocladum*; total biotic cover was estimated at 35.1% and *Codium* cover was 24.8%.

ANNO

06/09/1987

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ACC 4022
TYPE P
YEAR 1985
AUTH CONTINENTAL SHELF ASSOCIATES, INC.;
TITL LIVE-BOTTOM SURVEY OF PULLEY RIDGE AREA BLOCKS 629, 630, 716, 760, AND 761.

BIBL A REPORT FOR UNION OIL COMPANY OF CALIFORNIA, HOUSTON, TX. 61 P.

KEYW LIVE BOTTOM	BIOLOGY	EPIBIOTA
INVERTEBRATE	BENTHIC	PHOTODOCUMENTATION
SURVEY	REMOTE SENSING	

ABST In accordance with MMS stipulations for anticipated exploratory drilling in offshore oil and gas lease blocks, a photodocumentation survey was conducted in and around Pulley Ridge Area Blocks 629, 630, 716, 760, and 761. The survey involved dredge sampling and remote photography using an underwater television and still camera system that was towed along numerous transects (1,370 km total length). Water depth in the blocks surveyed was 65 to 75 m. The substrate was predominantly coarse sand and rubble. The percent occurrence of areas characterized as live bottom was 75% of the total transect length surveyed in Blocks 629 and 630 and 90% of the transect length surveyed in Blocks 716, 760 and 761; however, biotic cover within areas identified as live bottom averaged only 6.2%. Algae and sponges were the main constituents of total biotic cover. Two hundred ninety-seven taxa were collected in twenty dredge samples, with crustaceans, molluscs, and bryozoans contributing the largest proportion of the total.

ANNO

06/09/1987

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ACC 4251

TYPE P

YEAR 1982

AUTH CONTINENTAL SHELF ASSOCIATES, INC., TEQUESTA FL (USA)

TITL STUDY OF THE EFFECT OF OIL AND GAS ACTIVITIES ON REEF FISH POPULATIONS IN THE GULF OF MEXICO OCS AREA. VOLUME 1.

BIBL 217 PP.

KEYW OIL AND GAS
POPULATION

REEF
LIVE BOTTOM

FISH

ABST The primary purposes of this study were: (1) to collect quantitative data for comparison of reef fish populations associated with natural hard bottom areas and offshore oil and gas structures and (2) to develop fish population sampling methods which can be applied in deep areas that exclude or limit direct observations. The study was designed as a three-phase effort with each phase having specific objectives: (1) Phase I--evaluation of potential study sites (2) Phase II--evaluation of equipment and methods and (3) Phase III--generation and evaluation of standing stock estimates for fish species. The study area was the northern Gulf of Mexico outer continental shelf (OCS) between 90 and 94 degrees W longitude and the 18 and 200-m isobaths. There are numerous hard bottom areas described as "natural reefs" within this area.

ANNO

06/09/1987

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ACC 4252

TYPE P

YEAR 1982

AUTH CONTINENTAL SHELF ASSOCIATES, INC., TEQUESTA, FL (USA);

TITL STUDY OF THE EFFECT OF OIL AND GAS ACTIVITIES ON REEF FISH POPULATIONS IN THE GULF OF MEXICO OCS AREA. VOLUME 1.

BIBL 19 PP.

KEYW OIL AND GAS
POPULATION

REEF
LIVE BOTTOM

FISH

ABST The primary purposes of this study were: (1) to collect quantitative data for comparison of reef fish populations associated with natural hard bottom areas and offshore oil and gas structures and (2) to develop fish population sampling methods which can be applied in deep areas that exclude or limit direct observations. The study was designed as a three-phase effort with each phase having specific objectives: (1) Phase I--evaluation of potential study sites (2) Phase II--evaluation of equipment and methods and (3) Phase III--generation and evaluation of standing stock estimates for fish species. The study area was the northern Gulf of Mexico outer continental shelf (OCS) between 90 and 94 degrees W longitude and the 18 and 200 isobaths. There are numerous hard bottom areas described as "natural reefs" within this area.

ANNO

06/09/1987

.....
ACC 2081
TYPE P
YEAR 1978
AUTH COOKSEY, K.E.; PAUL, J.H.;
TITL ATP DETERMINATION IN THE MAFLA TRACT. 1977-1978.

IN: MAFLA FINAL REPORT (THE MISSISSIPPI, ALABAMA, FLORIDA OUTER
CONTINENTAL SHELF BASELINE ENVIRONMENTAL STUDY 1977/1978).

BIBL DAMES AND MOORE, INC. FOR BUREAU OF LAND MANAGEMENT CONTRACT
#AA550-CT7-34. II(11):608-625.

KEYW HYDROGRAPHIC	SEDIMENT	CARBONATE
ORGANIC CARBON	ATP	SEASONALITY
MAFLA	GRAIN SIZE	

ABST Three seasonal variations in sediment ATP levels were found in the MAFLA area. These variations correspond to three distinct geographic areas and to hydrographic and sediment calcium carbonate data for the areas. No correlation was found for ATP and sediment size or total organic carbon.

ANNO

06/09/1987

.....
ACC 4023
TYPE P
YEAR 1973
AUTH COOPER, G.A.;
TITL BRACHIOPODS (RECENT). MEMOIRS OF THE HOURGLASS CRUISES. VOL. III, PART II
I.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 17 P.

KEYW	BIOLOGY	BENTHIC	SYSTEMATIC
	MORPHOLOGY	DISTRIBUTION	HOURGLASS
	ECOLOGY	INVERTEBRATE	

ABST Brachiopods collected during Project Hourglass consist on an inarticulate, *Glottidia pyramidata* (Stimpson), and an aberrant articulate, *Platidia*, new species. The well known *Glottidia* is discussed only briefly. Muscle arrangement in the *Platidia* is like that of *Megerlia* in which adjustor muscles are well developed but didcutors are reduced. To open its valves, the *Platidia* must lift itself on its pedicle. The muscle arrangement that facilitates this and the opening of the valves is explained.

ANNO

06/09/1987

.....

ACC 4327
TYPE P
YEAR 1982
AUTH COPPER, C.;
TITL SOUTHWEST FLORIDA SHELF CIRCULATION MODEL. VOL. 1.

BIBL FINAL REPORT MINERALS MANAGEMENT SERVICE, METAIRIE, LA.
NO. MMS-GM-PT-83-001. 336 P.
KEYW CIRCULATION POLLUTANT DRILLING
CONTINENTAL SHELF MODEL METEOROLOGY
LOOP CURRENT

ABST This report summarizes an 18-month study funded by the Minerals Management Service. Motivation for the study arose from the Service's intention to grant leases for oil exploration, and the need to estimate the probable destination of water-borne pollutants originating from drilling and for predicting seasonal water circulation on the southwest continental shelf. Because of modeling considerations, the study area was expanded to include the contiguous West Florida Shelf (WFS) extending from the Florida Keys in the south to Apalachicola in the north and the 200 m isobath to the west.

ANNO

06/09/1987

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ACC 225
TYPE
YEAR 1973
AUTH CORCORAN, E.F.;
TITL CHEMICAL OCEANOGRAPHY.

IN: J.I. JONES, R.E. RING, M.O. RINKEL, AND R.E. SMITH, EDS.
A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBURG, FL.

KEYW CHEMICAL OCEANOGRAPHY CONTINENTAL SHELF CURRENTS
DISSOLVED OXYGEN ESTUARY NUTRIENT
LOOP CURRENT TRACE METAL

ABST A review of the chemical investigations made on the waters of the eastern Gulf of Mexico indicates that most studies have been concerned with water mass characterization, structure of the Loop Current, and nutrient distribution. The parameters measured in these studies were primarily salinity, temperature, dissolved oxygen, and inorganic phosphates. More recent research has added the investigation of suspended material, dissolved and particulate carbon, and certain trace metals. Further study of nutrients and trace metal distribution is needed. This report includes materials on chemical data for the estuarine and nearshore environments, including extensive tables on water quality and constituents in the major bays and estuaries.

ANNO

06/09/1987

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ACC 2010
TYPE P
YEAR 1970
AUTH COSTELLO, T.J.; ALLEN, D.M.;
TITL SYNOPSIS OF BIOLOGICAL DATA ON THE PINK SHRIMP, PENAEUS DUORARUM.

BIBL FAO FISH. REPT. 57:1499-1537.

KEYW PINK SHRIMP	DISTRIBUTION	POPULATION DYNAMICS
FISHERY	CRUSTACEAN	LIFE HISTORY
SHRIMP FISHERY		

ABST This synopsis on the pink shrimp, *Penaeus duorarum*, summarizes all available information concerning its taxonomy, distribution, life history and population dynamics. The shrimp fishery, management methods, and shrimp aquaculture are also discussed in detail. An extensive reference section is included.

ANNO

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ACC 2337
 TYPE P
 YEAR 1966
 AUTH COSTELLO, T.J.; ALLEN, D.M.;
 TITL MIGRATIONS AND GEOGRAPHIC DISTRIBUTION OF PINK SHRIMP, PENAEUS DUORARUM, OF
 THE TORTUGAS AND SANIBEL GROUNDS, FLORIDA

BIBL FISH. BULL. 65(2):449-459

KEYW	MIGRATION	GEOGRAPHIC	DISTRIBUTION
	PINK SHRIMP	DECAPOD	ZOOGEOGRAPHY
	TAGGING		

ABST To study shrimp stocks from Sanibel Island and the Dry Tortugas, 15 mark-recovery experiments in which biological stains were used as the marking agent were conducted. The timing and distribution of shrimp migrations from nursery areas to offshore grounds were determined. The estuarine nursery grounds included Florida Bay and estuaries extending at least as far north as Indian Key on the southwest coast of Florida for the Tortugas shrimp, and from Indian Key north to Pine Island Sound for Sanibel shrimp. The geographic ranges of the Tortugas and Sanibel pink shrimp stocks overlapped in the nursery areas near Indian Key, and in the offshore bottom water between the two trawling grounds. The geographic distributions depicted were suggested to be conservative.

ANNO

06/09/1987

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ACC 2338

TYPE P

YEAR 1968

AUTH COSTELLO, T.J.; ALLEN, D.M.;

TITL MORTALITY RATES IN POPULATIONS OF PINK SHRIMP, *PENAEUS DUORARUM*, ON THE SAN IBEL AND TORTUGAS GROUNDS, FLORIDA.

BIBL U.S. FISH AND WILDLIFE SERVICE, FISH. BULL. 66:491-502.

KEYW MORTALITY
FISHERY

PINK SHRIMP

SHRIMP FISHERY

ABST Estimates of fishing and natural mortalities were obtained from work-recovery experiments on *Penaeus duorarum* on the Sanibel and Tortugas grounds. In the Sanibel population there was a 6.8% fishing mortality and 14.8% loss from other causes. In the tortugas population fishing mortality was 13.1% and all other losses were 19.9%. Assumptions used in statistical analyses and validity of estimates are discussed.

ANNO

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ACC 2352
TYPE P
YEAR 1975
AUTH COURTNEY, C.M.;
TITL MANGROVE AND SEAWALL OYSTER COMMUNITIES, MARCO ISLAND, FLORIDA.

BIBL PAPER PRESENTED AT WESTERN SOCIETY OF MALACOL.--AM. MALACOL. UNION
JOINT MEETING. JUNE 22-26, 1975.

KEYW COLLIER	COMMUNITY	PHYSICAL
CHEMICAL	INVERTEBRATE	MOLLUSC
OYSTER	DISTRIBUTION	

ABST Mangrove and seawall oyster community studies indicated that oysters settle on seawalls in numbers equal to their natural system counterparts, the mangrove prop root oysters. A large majority of other oyster community inhabitants found man-made systems conducive to their development and survival. A multitude of factors (physical and chemical tolerances, tidal flushing rates, climatology, etc.) accounted for the presence or absence of particular species. Clumped distributions were the rule rather than the exception.

ANNO

06/09/1987

.....
ACC 2082
TYPE U
YEAR 1977
AUTH CREEZE, M.R.;MATURO, F.J.;
TITL MEIOFAUNA OF THE MAFLA AREA (1975-76).

BIBL UNPUBL. REPORT SUBMITTED TO THE U.S. DEPARTMENT OF THE INTERIOR,
BUREAU OF LAND MANAGEMENT, WASHINGTON, DC. 19 P.

KEYW MEIOFAUNA DIVERSITY TEMPERATURE
SALINITY SEDIMENT DISSOLVED OXYGEN
MAFLA

ABST This report presents the results of the meiofauna study of the Bureau of Land Management sponsored program in the Mississippi, Alabama, Florida (MAFLA) outer continental shelf. The authors summarize the results as follows: The results of this study, so far as analysis has been possible, show an abundant nematode and copepod fauna, with densities comparable with the few values previously reported. Presumably, the nematodes will be quite diverse, with the most abundant ten species making up about 50% of the assemblage. Perhaps one third as many species of copepods would be expected. The next most abundant groups are the Turbellaria and Gastrotrocha, although Kinorhynchia may be more common in muds. We have found about 200 species of turbellarians in the MAFLA areas. Although samples have been a little too small to adequately sample the turbellarian assemblage for diversity measures, characteristic groups have been found. Furthermore, grouping of species into more easily recognized taxonomic units has proven valuable. Gastrotrich genera and some "minor" taxonomic groups also offer promise of helping to characterize sediments with several "cross referencing" indicator groups allowing a sensitive biological indicator of environmental conditions.

ANNO

06/09/1987

.....
ACC 4024

TYPE P

YEAR 1970

AUTH CROLEY, F.C.; DAWES, C.J.;

TITL ECOLOGY OF THE ALGAE OF A FLORIDA KEY. I. A PRELIMINARY CHECKLIST, ZONATION
, AND SEASONALITY.

BIBL BULL. MAR. SCI. 20(1):165-185.

KEYW BIOLOGY

ECOLOGY

SEASONALITY

BENTHIC

DISTRIBUTION

COASTAL

EPIFLORA

LIVE BOTTOM

ALGAE

ABST The marine algae of the Content Keys, Monroe County, Florida, were studied in the field and laboratory for 2 1/2 years. Environmental and floristic data are presented in a descriptive account of the zonation, seasonality, and periodicity of the littoral and sublittoral algae. The preliminary checklist comprises 258 taxa: 79 Chlorophyta, 29 Phaeophyta, and 150 Rhodophyta. Four taxa of Chlorophyta and 10 of Rhodophyta are new records for Florida coasts.

ANNO

06/09/1987

.....
ACC 2083

TYPE P

YEAR 1981

AUTH CROUT, R.;

TITL SEDIMENT INFLUX INTO THE GULF OF MEXICO - A REVIEW.

IN: PROC. OF A SYMP. ON ENVIRON. RESEARCH NEEDS IN THE GULF OF MEXICO.
KEY BISCAYNE, FL. 30 SEPT.-5 OCT. 1979. D.K. ATWOOD (CONVENER).

BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LABORATORY, MIAMI,
FL. VOL. IIC:1-32.

KEYW SEDIMENT SUSPENDED

ABST This summary paper reviews the state of knowledge on sediment influx, suspended particulates, transport of sediments, bottom material and the processes that affect Gulf of Mexico sediments. Description of sediments is divided into nine regions in the Gulf of Mexico including the west Florida shelf and the eastern Gulf shelf.

allowing a sensitive biological indicator of environmental conditions.

ANNO

06/09/1987

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ACC 341

TYPE

YEAR 1976

AUTH CROZIER, G.F.;BROWN, L.R.;DEAN, D.M.;JONES, E.E.;MCILWAIN, T.D.;SHIPP, R.L.

TITL DEVELOPMENT OF ARTIFICIAL REEFS.

BIBL IN: J.E. SEWARD, ED. 1975 ANNUAL REPORT -- MISSISSIPPI-ALABAMA SEA GRANT C
ONSORTIUM. MASG-Q-76-001.

KEYW BENTHIC FAUNA

DEMERSAL FISH

LIGHT ATTENUATION

PELAGIC FISH

SALINITY

SEDIMENT TEXTURE

WATER TEMPERATURE

ARTIFICIAL REEF

ARTIFICIAL HABITAT

ABST The faunal development of 3 artificial reefs (Wallace, Sparkman, and Allen)
off the Alabama coast is being monitored in an effort to describe the fact
ors that influence reef colonization, development and survival.

ANNO

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ACC 4025
 TYPE P
 YEAR 1982
 AUTH CULVER, S.J.;BUZAS, M.A.;
 TITL RECENT BENTHIC FORAMINIFERAL PROVINCES BETWEEN NEWFOUNDLAND AND YUCATAN.

BIBL GEOL. SOC. AM. BULL. 93:269-277.

KEYW BENTHIC	BIOLOGY	FORAMINIFERA
SYSTEMATIC	BIOGEOGRAPHY	DISTRIBUTION
CONTINENTAL SHELF	ZOOGEOGRAPHY	

ABST In 219 papers published over 130 years, 1,241 species of recent benthic foraminifera were recorded from 968 localities on the Atlantic continental margin of North America and in the Gulf of Mexico. On the Atlantic continental margin, 876 species were recorded and in the Gulf of Mexico, 848; 483 species (39% of 1,241) occur in both areas. On the Atlantic continental margin, 149 species occur at 4% or more of 542 localities, and in the Gulf of Mexico 295 species occur at 4% or more of 426 localities; 71 of these species (19% of 373) commonly occur in both areas. These comparisons show that the two areas differ fundamentally in faunal composition. Cluster analysis of presence or absence distributional data (live and dead foraminifera) delimited seven large provinces on the Atlantic continental margin and four provinces in the Gulf of Mexico. Atlantic continental margin: (a) Northern Coastal Province, (b) Northern Shelf Province, (c) Northern Slope and Rise Province, (e) Southern Shelf Province, (f) Southern Slope Province, (g) Bahaman Province. Gulf of Mexico: (a) Coastal Province, (b) Inner Shelf Province, (c) Outer Shelf Province, (d) Slope and Abyssal Plain Province. Bottom-water mass and provincial patterns show good spatial correlation on the Atlantic continental margin and in the Gulf of Mexico.

ANNO

06/09/1987

.....
ACC 2042
TYPE P
YEAR 1961
AUTH CUMMINGS, W.C.;
TITL MATURATION AND SPAWNING OF THE PINK SHRIMP, P. DUORARUN.

BIBL TRANS. AM. FISH. SOC. 90:462-468.

KEYW LIFE HISTORY PINK SHRIMP SPAWNING
 TEMPERATURE CRUSTACEAN

ABST Life history parameters of the pink shrimp, *Penaeus duorarun*, were measured monthly in a year-long study on the Tortugas shrimping grounds. Four stages of female maturation were described using ovum size frequency, gross observation, and ratio of gonad weight to tail weight. Size at first sexual maturity, duration of spawning activity, and spawning frequency were determined. Spawning activity is believed to be closely correlated with annual temperature fluctuations.

ANNO

06/09/1987

.....
ACC 354
TYPE
YEAR 1959
AUTH CURL, H.;
TITL THE HYDROGRAPHY OF THE INSHORE GULF OF MEXICO.

BIBL PUBL. INST. MAR. SCI., UNIV. TEX. 6:193-205.

KEYW COASTAL WATER	HYDROGRAPHY	PHYSICAL PROCESS
SALINITY	TEMPERATURE	PHYSICAL OCEANOGRAPH

ABST

ANNO

06/09/1987

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ACC 976
TYPE
YEAR 1971
AUTH CUSTODI, G.L.;
TITL A SURVEY OF MERCURY IN THE GULF OF MEXICO.

BIBL MASTER'S THESIS. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 141 PP.

KEYW MERCURY	SEDIMENT	WATER COLUMN
METAL	TRACE METAL	

ABST An investigation was made into the distribution of mercury in the Gulf of Mexico. Water and sediment samples were collected at 44 stations and analyzed for mercury content between February and October 1971.

ANNO

06/09/1987

.....
ACC 85
TYPE
YEAR 1977
AUTH DADDIO, E.;
TITL RESPONSE OF COASTAL WATERS TO ATMOSPHERIC FRONTAL PASSAGE IN THE MISSISSIPPI
I DELTA REGION.

BIBL CENTER FOR WETLAND RESOURCES, LOUISIANA STATE UNIVERSITY, BATON ROUGE, LA.
TECHNICAL REPORT NO. 234. 35 PP.

KEYW CURRENTS METEOROLOGY PHYSICAL PROCESS
WIND STRESS

ABST Two current vector time series obtained in the Mississippi Bight exhibit clockwise polarized currents of near-inertial frequency that are closely associated with shifting winds. Because of the closeness of the local inertial period and the diurnal tidal period, it is difficult at first glance to determine the true nature of the observed rotary currents. However, complex modulation at the inertial frequency reveals a strong signal accompanying wind shifts that are usually associated with the passage of atmospheric fronts. Spectral analysis for clockwise and counterclockwise frequencies indicates a highly energetic peak in the inertial-diurnal frequency band for the clockwise spectrum. The rotary coefficient computed from the autospectra and quadrature spectrum of the vector components gives $CR > 0.9$ in the vicinity of the inertial-diurnal frequency band. A model using wind stress as a forcing function is highly effective in reproducing sinusoidal oscillations seen in the observed current. These oscillations occur in conjunction with shifts in the wind direction. Because of the close association of the near-inertial oscillations with local wind effects, it is concluded that inertial currents are locally induced by wind stress. Furthermore, wind stress not only initiates the rotary current but is highly effective in destroying them.

ANNO

06/09/1987

.....
ACC 198
TYPE
YEAR 1979
AUTH DAMES AND MOORE;
TITL THE MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINENTAL SHELF BASELINE ENVIRON
MENTAL SURVEY, MAFLA 1977/1978. VOLUME 1-A. PROGRAM SYNTHESIS REPORT.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-79/01-VOL-1-A. 278 PP

KEYW BIOLOGY CURRENTS ECOLOGY
 GEOLOGY HYDROCARBON CONTINENTAL SHELF
 PHYSICAL PROCESS SALINITY MAFLA

ABST A third year baseline marine environmental survey was conducted and a synthesis report prepared. Marine geology, physical oceanography, marine biology, trace metal and hydrocarbon chemistry of the water column, sediments and tissues were examined for the Mississippi, Alabama, Florida Outer continental shelf in support of prospective OCS oil and gas development. Physical oceanographic and sediment geology data provided information to better understand the biological and chemical distributions. A data base was created merging data collected from 1974-1978 into a single format.

ANNO

06/09/1987

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ACC 199

TYPE

YEAR 1979

AUTH DAMES AND MOORE;

TITL THE MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINENTAL SHELF BASELINE ENVIRONMENTAL SURVEY, MAFLA. 1977/1978. VOLUME 1-B. EXECUTIVE SUMMARY REPORT.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-79/02-VOL-1-B. 30 PP.

KEYW BIOLOGY

ECOLOGY

FISH

GEOLOGY

HYDROGRAPHY

OCEANOGRAPHY

OIL

CONTINENTAL SHELF

POLLUTION

SEDIMENT

MAFLA

ABST The prime purpose of the MAFLA program was the determination of ongoing or potential impacts on the outer continental shelf (OCS) environment from oil and gas development. The Executive Summary Report is organized along the same lines as the Program Synthesis Report, with sections on methodology, geology, physical oceanography, chemistry and biology. A brief summary and lists of recommended monitoring parameters and major deficiencies in the data base are also included.

ANNO

06/09/1987

.....
ACC 300

TYPE

YEAR 1979

AUTH DAMES AND MOORE;

TITL THE MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINENTAL SHELF BASELINE ENVIRONMENTAL SURVEY, MAFLA, 1977/1978. VOLUME II-A. COMPENDIUM OF WORK ELEMENT REPORTS.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-79/08-VOL-2-A. 537 PP

KEYW BENTHIC COMMUNITY BIOLOGY ECOLOGY
GEOLOGY MINERALOGY OIL
CONTINENTAL SHELF POLLUTION SEDIMENT
MAFLA

ABST This report presents the results of a four year investigation of the surface sediments of the eastern Gulf of Mexico continental shelf. In the first two years our approach consisted of sampling from two of the replicate box cores at each station and each season. During the final summer and year the authors altered their approach by collecting a large number of replicates at each of the relatively small number of stations in order to determine small scale variability. In addition to sedimentologically characterizing the MAFLA margin, the authors task was to provide ancillary data for sediment chemistry and benthic biological studies.

ANNO

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ACC 301
TYPE
YEAR 1979
AUTH DAMES AND MOORE;
TITL THE MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINENTAL SHELF BASELINE ENVIRON
MENTAL SURVEY, MAFLA, 1977/1978. VOLUME II-B. COMPENDIUM OF WORK ELEMENT RE
PORTS.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-79/08-VOL-2-B. 546 PP

KEYW INVERTEBRATE BIOLOGY DISEASE
 DRILLING ECOLOGY FISH
 HYDROCARBON OIL POLLUTION
 TEMPERATURE MAFLA

ABST Demersal, or bottom fishes, are represented by numerous species at the peak of the trophic level. These top carnivores are, therefore, primary candidates for analysis of any sort of biological concentration or magnification of substances passing through the lower trophic levels. In addition, many of the benthic fishes are substrate-specific and reflect and corroborate distribution of sediment types. Many of the forms exhibit abbreviated larval development, and thus are good indicators of historical zoo-geographical patterns. Finally, to the public at large, fishes represent an identifiable unit, recognizable and deserving of study, especially in regard to possible effects by drilling interests.

ANNO

06/09/1987

.....
ACC 851
TYPE
YEAR 1975
AUTH DAMES AND MOORE;
TITL THE LOUISIANA OFFSHORE OIL PORT (LOOP) ENVIRONMENTAL ASSESSMENT.

BIBL LOUISIANA OFFSHORE OIL PORT (LOOP), INC., NEW ORLEANS, LA.

KEYW AIR TEMPERATURE	BENTHIC FAUNA	CRABON
DEMERSAL FISH	DISSOLVED OXYGEN	ELECTRICAL CONDUCTIV
METAL	NUTRIENT	PH
PORT	BOD	PIPELINE

ABST As part of the LOOP, Inc. environmental assessment, a field study of the of fshore mooring site, the onshore storage facility, and the proposed pipelin e route was initiated in June, 1973 to continue to May, 1974. The objective s are to describe the ecosystems impacted by the proposed LOOP project, inc luding an environmental inventory. Physical, chemical, and biological param eters are studied. This report deals with the offshore portion of the study .

ANNO

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ACC 4159
 TYPE P
 YEAR 1986
 AUTH DANEK, L.J.;LEWBEL, G.S.;
 TITL SOUTHWEST FLORIDA SHELF BENTHIC COMMUNITIES STUDY YEAR 5 ANNUAL REPORT.

A FINAL REPORT BY ENVIRONMENTAL SCIENCE AND ENGINEERING, INC. & LGL
 ECOLOGICAL RESOURCE ASSOCIATES, INC. CONTRACT #14-12-001-30211.

BIBL SUBMITTED TO THE MINERALS MANAGEMENT SERVICE, NEW ORLEANS, LA. 3 VOL.

KEYW PHYSICAL	OCEANOGRAPHY	CURRENTS
WAVE	TIDE	HYDROGRAPHY
SEDIMENT	BIOLOGICAL	EPIFAUNA
FISH	MACROALGAE	RECRUITMENT
FOULING	POPULATION DYNAMICS	SWFLA

ABST This report presents the findings of the 5th year of a 6-yr study of the southwest Florida outer continental shelf benthic communities. The emphasis of the study was on the physical and biological processes that occur in soft, hard, and live bottom communities and an assessment of how these processes and communities might be affected by offshore oil and gas development. Epifauna, macroalgae, fish, sediments, salinity, temperature, dissolved oxygen, transmissivity, and pH, were sampled using a variety of methods including underwater television, benthic still photography, CTD hydrographic sampling, trawling and dredging. In addition, at 8 stations continuous monitoring of near-bottom temperature, ocean currents, waves, tides, sediment transport, epifaunal recruitment, and fish behavior was accomplished using instrumented arrays equipped with current meters, wave and tide gages, sediment traps, fouling plates, and time-lapse cameras. The biological data collected identified a diversity of taxa varying from a very dense epifauna hard-bottom community in shallow water (e.g., over 100 species of sponges) to a sparse crinoid assemblage at the shelf break in 125 m of water. The shallow water communities are subject to greater natural stresses due to higher rates of sediment resuspension (up to 1,000 metric tons/sq.km/day), higher frequency of wave induced water velocities, and considerable seasonal temperature variation. In spite of these stresses, these communities flourish and exhibit a recruitment rate that is higher than the stations located in water deeper than 50 m. The deeper stations, located further offshore, altho

ANNO

06/09/1987

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ACC 4296
TYPE P
YEAR 1976
AUTH DANENBERGER, E.P.;
TITL OIL SPILLS 1971-75, GULF OF MEXICO OUTER CONTINENTAL SHELF.

BIBL U.S. GEOL. SURV. (WASHINGTON, D.C.) 741:47 P.

KEYW OIL SPILL CONTINENTAL SHELF PETROLEUM
 POLLUTION

ABST

ANNO

06/09/1987

.....
ACC 841
TYPE
YEAR 1977
AUTH DANIELS, K.L.;
TITL DESCRIPTIONS, COMPARISON AND DISTRIBUTION OF LARVAE OF CYNOSCION NEBULOSUS
AND CYNOSCION ARENARIUS FROM THE NORTHERN GULF OF MEXICO.

BIBL MASTER'S THESIS. LOUISIANA STATE UNIVERSITY, BATON ROUGE, LA. 48 PP.

KEYW DEMERSAL FISH SEA TROUT MORPHOLOGY
 DISTRIBUTION LARVAE

ABST This study presents a comparison of spotted sea trout (*Cynoscion nebulosus*) and sand seatrout (*Cynoscion arenarius*) in terms of morphological development, pigmentation and osteological development. The specimens examined were taken from 1971 to 1977 on various Oregon cruises.

ANNO

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ACC 2084
TYPE P
YEAR 1978
AUTH DARCY, G.H.;GUTHERZ, E.J.;
TITL ABUNDANCE AND DENSITY OF DEMERSAL FISHES ON THE WEST FLORIDA SHELF, JANUARY
1978.

BIBL BULL. MAR. SCI.

KEYW DEMERSAL FISH	SHRIMP	PINK SHRIMP
FISH	ABUNDANCE	DISTRIBUTION
ROCK SHRIMP		

ABST Three hundred thirty eight stations were trawled on the west Florida shelf during January 1978 to determine fish species composition and abundance. At least 246 species of fish from 71 families were collected. Northern stations had approximately twice the fish density as southern stations. Total catch rates were usually highest in shallow water. Some commercially important shrimps (*Penaeus setiferus*, *P. duorarum*, *Sicyonia brevirostris*, *Scylla rides nodifer*) were also caught. Although qualitatively similar to other areas of the northern Gulf, the fish fauna of the west Florida shelf consisted of different dominant families and species. Differences in fish faunal composition are related to bottom type.

ANNO

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ACC 4026

TYPE P

YEAR 1984

AUTH DARDEAU, M.R.;

TITL SYNALPHEUS SHRIMPS (CRUSTACEA: DECAPODA: ALPHEIDAE). I. THE GAMBARELLOIDES GROUP WITH A DESCRIPTION OF A NEW SPECIES. MEMOIRS OF THE HOURGLASS CRUISES. VOL. VII, PART II.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 125 P.

KEYW SYSTEMATIC	REPRODUCTION	COMMENSAL
CRUSTACEA	BIOLOGY	ZOOGEOGRAPHY
LIFE HISTORY	HOURGLASS	INVERTEBRATE
EPIFAUNA	ECOLOGY	CONTINENTAL SHELF
SHRIMP		

ABST Distributional data and references to each of the 19 Gambarelloides species of Synalpheus from the Western Atlantic Region are summarized in individual species accounts. The 11 species known from the Gulf of Mexico, including a new species from the Florida Middle Ground described herein, are diagnosed and illustrated. Synalpheus bousfieldi and S. herricki are resurrected from the synonymy of S. brooksi, and S. pandionis is resurrected from the synonymy of S. longicarpus. Synalpheus herricki is redescribed, and S. taneri placed in its synonymy. Synalpheus osburni is placed in the synonymy of S. goodei. A key to all Synalpheus known from the Western Atlantic Region is provided. Male/female ratios of most Gambarelloides species approached unity, and virtually all adult females were ovigerous. Seasonal influence on reproduction seemed to be negligible. Recruitment of juveniles occurred year-round. Immature individuals of at least six Gambarelloides species carried infertile eggs. Many species were found in male-female pairs associated to varying degrees with living substrates. Sponges were frequent hosts, and complex cryptofaunal communities of up to five Synalpheus species were not uncommon. Population abundances of all Gambarelloides species were greatest beyond the 37 m isobath on the central west Florida continental shelf. Species of the Gambarelloides group of Synalpheus lend a tropical complexion to benthic communities within the Gulf of Mexico. There seem to be no clear cut faunal barriers to this group within the northern portion of the Western Atlantic Region.

ANNO

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ACC 4027

TYPE P

YEAR 1983

AUTH DARDEAU, M.R.; HEARD, R.W., JR.;

TITL CRANGONID SHRIMPS (CRUSTACEA: CARIDEA), WITH A DESCRIPTION OF A NEW SPECIES
OF PONTOCARIS. MEMOIRS OF THE HOURGLASS CRUISES. VOL. VI, PART II.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PE
TERSBERG, FL. 39 P.

KEYW BENTHIC	CRUSTACEA	SYSTEMATICS
ZOOGEOGRAPHY	BIOLOGY	EPIFAUNA
HOURGLASS	ECOLOGY	INVERTEBRATE
CONTINENTAL SHELF	SHRIMP	

ABST A single species of crangonid shrimp, *Pontophilus gorei*, was captured durin
g the 28-month Hourglass sampling program on the West Florida continental s
helf. Examination of the literature and of material at the National Museum
of Natural History and in Texas A&M Universty collections revealed six add
itional crangonid species from the deeper water beyond the shelf in the Gul
f of Mexico and Caribbean: *Sabinea tridentata*, *Pontophilus brevirostris*, *P*
. *gracilis*, *P. talismani*, *Pontocaris caribbaea* and *Pontocaris vicina* n. sp.

All species are diagnosed, illustrated and accompanied by synonymies. A
key to the known genera of Crangonidae and an illustrated key to the seven
species known from the Gulf of Mexico are provided. Population abundance o
f *Pontophilus gorei* was greatest at the 73 m Hourglass stations and decreas
ed successively at the 55 m and the 37 m stations. The monthly distributio
n of ovigerous females indicates an extended breeding season.

ANNO

06/09/1987

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ACC 192

TYPE

YEAR 1983

AUTH DARNELL, R.M.;DEFENBAUGH, R.E.;MOORE, D.;

TITL NORTHWESTERN GULF SHELF BIO-ATLAS. A STUDY OF THE DISTRIBUTION OF DEMERSAL FISHES AND PENNAEID SHRIMP OFF SOFT BOTTOMS OF THE CONTINENTAL SHELF FROM THE RIO GRANDE TO THE MISSISSIPPI RIVER DELTA.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE, LA. OPEN FILE REPORT NO. 82-04. 438 PP.

KEYW	BIOLOGY	CONTINENTAL SHELF	DISTRIBUTION
	ECOLOGY	FAUNA	FISHERY
	SALINITY	SEDIMENT	TEMPERATURE
	SHRIMP	DEMERSAL FISH	

ABST

ANNO

06/09/1987

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ACC 894
TYPE
YEAR 1976
AUTH DARNELL, R.;
TITL BIO ENERGETICS STUDY - GULF OF MEXICO.

BIBL TEXAS A&M UNIVERSITY. DEPARTMENT OF OCEANOGRAPHY. COLLEGE STATION, TX.

KEYW BATHYMETRY BENTHIC FAUNA DEMERSAL FISH
 INVERTEBRATE

ABST The data file represents results of a two year study involving over 150 stations on the northern Gulf Coast extending from Panama City Florida to Corpus Christi, Texas. Samples include benthic fishes and benthic macroinvertebrates.

ANNO

06/09/1987

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ACC 1081

TYPE

YEAR 1956

AUTH DARNELL, R.M.; WILLIAMS, A.B.;

TITL A NOTE ON THE OCCURRENCE OF THE PINK SHRIMP, PENAEUS DUORARUM, IN LOUISIANA WATERS.

BIBL ECOLOGY 37(4):844-846.

KEYW BIOLOGY

FISHERY

SHRIMP

SPECIES COMPOSITION

PINK SHRIMP

ABST

ANNO

.....
ACC 2011
TYPE P
YEAR 1975
AUTH DAROVEC, J.E., JR.; ET AL.;
TITL TECHNIQUES FOR COASTAL RESTORATION AND FISHERY ENHANCEMENT IN FLORIDA.

BIBL FLA. MAR. RES. PUBL. NO. 15:27.

KEYW SEAGRASS SEDIMENT ARTIFICIAL REEF

ABST Guidelines for the reestablishment of sand dunes, salt marshes, mangroves, and seagrasses were outlined. Several perennial plants including sea oats and bitter panic grass were recommended for stabilizing sand dunes; smooth cord grass and black needlerush for marsh transplantations; black, red, and white mangrove areas; and turtle grass, manatee, shoal grass and widgeon grass for grass bed restoration. For successful seagrass transplanting, sediment transfer along with the plant was advised. Planting densities, time of transplanting, and procedures for removal and care were discussed for each section. Guidelines also described habitat augmentation using artificial fishing reefs and oyster reefs.

ANNO

06/09/1987

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ACC 4028
TYPE P
YEAR 1983
AUTH DAROVEC, J.E., JR.;
TITL SCIAENID FISHES (OSTEICHTHYES: PERCIFORMES) OF WESTERN PENINSULAR FLORIDA.
MEMOIRS OF THE HOURGLASS CRUISES. VOL. VI, PART III.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 73 P.

KEYW FISH	SYSTEMATIC	LIFE HISTORY
DISTRIBUTION	DEMERSAL FISHES	BIOLOGY
HOURGLASS	BENTHIC	ECOLOGY
CONTINENTAL SHELF		

ABST Keys and diagnoses are given for the genera and fourteen species of Sciaenidae from western peninsular Florida. Summaries of published information on their distribution, life history, feeding and salinity and temperature tolerances are presented. *Menticirrhus focaliger* Ginsburg and *Cynoscion arena* rius Ginsburg are considered synonyms under *M. saxatilis* (Bloch and Schneider) and *C. regalis* (Bloch and Schneider), respectively. *Par* eques Gill is treated at the generic level. Length frequency and gonad analysis indicated *Equetus lanceolatus* (Linnaeus) spawns in late spring and summer. The smallest ripe females were 132 mm in standard length. Similar analyses for *Par* eques umbrosus (Jordan and Eigenmann) proved inconclusive. Gut contents showed that these reef species feed mainly on crustaceans. Trophic level systems, zoogeography, general life history, and position in the food web are discussed for the species captured and related species. These discussions present new hypotheses about intergeneric relationships, a demonstration of very different inshore and offshore sciaenid faunas in the study area, and descriptions of several examples of allometric growth exhibited by sciaenids of the west Florida shelf. An appendix provides information on Florida sciaenids not found in the area covered.

ANNO

06/09/1987

.....
ACC 2260

TYPE P

YEAR 1974

AUTH DAUER, D.M.;

TITL REPOPULATION OF THE POLYCHAETE FAUNA OF AN INTERTIDAL HABITAT FOLLOWING NAT
URAL DEFAUNATION.

BIBL PH.D. DISSERTATION. UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL.

KEYW POLYCHAETE
SEDIMENT

RED TIDE
TEMPERATURE

DISTRIBUTION
SALINITY

ABST Repopulation of the polychaete fauna following a massive red tide outbreak conformed to the species equilibrium model of MacArthur and Wilson (1963, 1967). Immigration of species was rapid, with the majority of immigration occurring within the first month of the study. An equilibrium number of species was established in the eleventh month, and remained relatively constant for the remainder of the study. Although species composition was fairly constant, the distribution of individuals among species changed greatly. Adult dispersal was determined to be a significant factor in the establishment of populations. Larval settlement was shown to be more significant in the maintenance than in the establishment of the populations in contrast to the pattern predicted by Thorson (1950, 1955, 1957, 1966).

ANNO

06/09/1987

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ACC 2261
TYPE P
YEAR 1976
AUTH DAUER, D.M.; CONNER, W.G.;
TITL ORGANIC ENRICHMENT EFFECTS UPON BENTHIC POLYCHAETE POPULATIONS.

BIBL V.J. SCI. 27(2):43.

KEYW POLYCHAETE HYPOXIA

ABST The effects of organic enrichment upon intertidal benthic polychaete populations of upper Old Tampa Bay, Florida, were examined. An experimental site near a sewage outfall was compared to a physically similar control site by monthly quantitative samples. Species numbers and density values for the experimental site were significantly higher than those of the control site. Species with benthic larval development were responsible for the observed density differences. A massive accumulation of *Ulva lactuca* (and accompanying anaerobic conditions) at the experimental site during the summer months resulted in species numbers and density values significantly lower than the control site. Reestablishment of the populations was rapid at the experimental site.

ANNO

06/09/1987

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ACC 2262
TYPE P
YEAR 1976
AUTH DAUER, D.M.; SIMON, J.L.;
TITL REPOPULATION OF THE POLYCHAETE FAUNA OF AN INTERTIDAL HABITAT FOLLOWING NAT
URAL DEFAUNATION: SPECIES EQUILIBRIUM.

BIBL OCEOLOGIA (BERL.) 22:99-117.

KEYW POLYCHAETE	RED TIDE	MODEL
TEMPERATURE	SALINITY	SEDIMENT

ABST During the summer of 1971, an outbreak of red tide resulted in the defaunation of a previously characterized sandy intertidal habitat. This study reported the recolonization of polychaete fauna in that area. The rates of immigration and extinction showed that repopulation conformed to the species equilibrium model of MacArthur and Wilson. Immigration was found to be rapid with an equilibrium number of species becoming established in the eleventh month. Although the species composition remained fairly constant, the distribution of individuals among species changed greatly.

ANNO

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ACC 586
 TYPE
 YEAR 1970
 AUTH DAVIES, D.K.; MOORE, W.R.;
 TITL DISPERSAL OF MISSISSIPPI SEDIMENTS IN THE GULF OF MEXICO.

BIBL J. SEDIMENT. PETROL. 40:339-353.

KEYW CONTINENTAL SHELF CONTINENTAL SLOPE GEOLOGY
 HEAVY MINERAL SEDIMENT DISTRIBUTIO SEDIMENT
 GEOLOGIC HISTORY

ABST Pleistocene and Recent Mississippi sediments possess a distinctive heavy mineral assemblage which retains its identity between Cairo, Illinois and the Gulf of Mexico Abyssal Plains. Thus this assemblage may be used to trace the Mississippi contribution to the Gulf of Mexico from fluvial, through deltaic, neritic and bathyal, to abyssal environments. Significant changes in the heavy mineral assemblage of sediments in the Gulf are related to source changes and not to the reworking or selective sorting of Mississippi sediments. As a result, three distinct sediment input sources may be recognized for detrital sediments in the Gulf of Mexico Abyssal Plain 1) The Mississippi, 2) the Rio Grande, and 3) the rivers of north-east Mexico. The Mississippi contribution is dominant and is only replaced by other inputs in the north-west and south-west corners of the abyssal plain. On the Louisiana-Texas Inner Continental Shelf, Mississippi sediment forms a veneer which extends between the present delta and the Sabine River. Dredge samples reveal that underlying sediments were derived from the central Texas rivers to the west, probably during a period of regression which occurred between 10,000 and 7,000 B.P. The interaction of a high zircon content and intense selective sorting in the Inner Continental Shelf sediment resulted in two areas of zircon enrichment which may be of economic significance. Because of the intensity of the heavy mineral assemblage of the Mississippi contribution to processes of selective sorting and reworking, only 200 non-opaque grains from one size fraction of one sample are needed to characterize this content.

ANNO

06/09/1987

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ACC 2044
TYPE P
YEAR 1982
AUTH DAVIS, G.E.;
TITL A CENTURY OF NATURAL CHANGE IN CORAL DISTRIBUTION AT THE DRY TORTUGAS: A CO
MPARISON OF REEF MAPS FROM 1881 AND 1976.

BIBL BULL. MAR. SCI. 32(2):608-623.

KEYW REEF CORAL DISTRIBUTION
METEOROLOGY STORM EVENT

ABST Reef maps prepared in 1881 and 1976 were compared to determine changes in coral reef structure and composition at Dry Tortugas, Florida, over a 95 year interval. Little change in area occupied by living hermatypic coral, less than 4% of the 23,000 hectare area mapped, occurred during the interval. Coral species distribution and reef types exhibited major changes. An octocoral dominated hard bottom in 1881 had been replaced by a 220 hectare *Acropora cervicornis* reef in 1976. Forty four hectares of *A. palmata* in 1881 were reduced to two small patches totaling less than 600 square meters in 1976. During the winter of 1976-77, 90% of *A. cervicornis* at Dry Tortugas was killed, apparently due to thermal shock. The importance of short term weather events in regulating coral reef structure and species distribution is discussed.

ANNO

06/09/1987

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ACC 2396
TYPE P
YEAR 1966
AUTH DAVIS, W.P.;
TITL OBSERVATIONS ON THE BIOLOGY OF OPHIUROID ASTROPHYTOM MURICATUM.

BIBL BULL. MAR. SCI. 16(3):435-444.

KEYW MONROE	HABITAT	MORPHOLOGY
BEHAVIOR	ECHINODERM	

ABST The behavior of the basketstar, *Astrophyton muricatum* was investigated during dives at reefs in the Florida Keys. Some laboratory observations were undertaken to facilitate more detailed study. Habitat, morphology, and feeding behavior are discussed, with emphasis on nocturnal activity. Associated reef organisms and their related behavior are also documented.

ANNO

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ACC 4029
 TYPE P
 YEAR 1977
 AUTH DAVIS, G.E.;
 TITL EFFECTS OF RECREATIONAL HARVEST ON A SPINY LOBSTER, PANULIRUS ARGUS, POPULATION.

BIBL BULL. MAR. SCI. 27(2):223-236.

KEYW BIOLOGY	CRUSTACEA	RECREATIONAL FISHERY
SPINY LOBSTER	TAGGING	MANAGEMENT
INVERTEBRATE	BENTHIC	

ABST A commercially unfished population of *Panulirus argus* was studied in Fort Jefferson National Monument at Dry Tortugas, Florida, from April 1971 to July 1975. For 29 months all harvest was prohibited, then an experimental sport harvest (hand caught by recreational divers) was allowed in 50% of the areas for a period of 8 months, followed by 16 months of complete protection for assessment of recovery. Data on the size, abundance, and natural history of the lobsters were collected using SCUBA, and commercial trapping techniques. A total of 4,257 lobsters, with a mean carapace length of 101 mm, was tagged and released at Dry Tortugas. The existence of a resident adult *P. argus* population was demonstrated by the recovery of all recaptured lobsters (7.3%) within 10 km of their respective capture sites up to 104 weeks after release. Immediately following the experimental sport harvest, the population in the sport harvested area showed a 58% reduction in trap catch rate and dispersed to 42% of its pre-harvest lair occupancy density, while the population in the unharvested control area remained essentially unchanged. The catch rate in the sport harvested area recovered to 78% of its pre-harvest level after 1 year of complete protection from harvest, and the lair occupancy rate recovery was 71% after 16 months of post harvest protection. The pre-harvest standing crop was estimated at 58.3 kg/ha, wet weight.

ANNO

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ACC 4030
 TYPE P
 YEAR 1978
 AUTH DAVIS, G.E.;
 TITL CHANGES IN THE EVERGLADES NATIONAL PARK RED DRUM AND SPOTTED SEATROUT FISHERIES 1958-1978: FISHING PRESSURE, ENVIRONMENTAL STRESS, OR NATURAL CYCLES?

BIBL IN: PROCEEDINGS OF THE RED DRUM AND SEDATROUT COLLOQUIM. P. 81-87.

KEYW BIOLOGY	COMMERCIAL FISHERY	RECREATIONAL FISHERY
SOCIOECONOMIC	SEA TROUT	REDFISH
FISH	COASTAL	

ABST Everglades National Park supports mixed recreational and commercial fisheries for red drum, *Sciaenops ocellata* and spotted seatrout, *Cynoscion nebulosus*. Within the 663,750 acres of the coastal waters of the park, there are six ecologically discrete systems ranging from 51,000 to over 164,000 acres each. Commercial fishing is prohibited in a total of 94,000 acres in two of these systems. The number of commercial fishermen involved in these fisheries fluctuated between 125 and 276 from 1963 to 1978. Recreational fishing activity increased steadily from 58,000 angler-days in 1959 to 174,000 in 1965. It fell slightly in the late 1960's, reached another peak of about 160,000 angler-days in 1973 and 1974, and fell again to less than 100,000 angler-days in 1977. Recreational fishermen caught 96% of the red drum and 55% of the spotted seatrout landed in Everglades National Park from 1972 through 1977. The mean annual yield of red drum from park waters was 0.366 pound per acre, and 0.250 pound per acre for spotted seatrout; producing mean annual harvests of 232,300 pounds of red drum and 158,600 pounds of spotted seatrout from 1972 through 1977. In the past 20 years three significant changes occurred in these park fisheries: (1) a shift in age structure toward larger, mature fish; (2) consistent trends in catch rates, upward for red drum (24 to 127%) and downward for spotted seatrout (6 to 54%); and (3) marked reductions in the year-to-year variability of catch rates for both species. Preliminary analysis of these observations suggests that changes in environmental conditions in park estuaries caused the changes in fishery

ANNO

06/09/1987

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ACC 4179

TYPE P

YEAR 1984

AUTH DAVIES, J.M.;BELL, J.S.;HOUGHTON, C.;

TITL A COMPARISON OF THE LEVELS OF HEPATIC ARYL HYDROCARBON HYDROXYLASE IN
FISH CAUGHT CLOSE TO AND DISTANT FROM NORTH SEA OIL FIELDS.

IN: PROCEEDINGS 2ND INTERNATIONAL SYMPOSIUM RESPONSE OF MARINE
ORGANISMS TO POLLUTANTS.

BIBL WOODS HOLE OCEANOGRAPHIC INSTITUTE. ELSEVIER APPLIED SCIENCE PUBLICATION.
LONDON 1984:23-45.

KEYW DRILLING MUD

HYDROCARBON

SEDIMENT

FISH

OIL

ABST Large-scale use of oil-based muds for drilling operations offshore can lead to high concentrations of aromatic hydrocarbons in the sediments close to these platforms. Fish were trawled from stations close to and distant from such platforms and the levels of hepatic aryl hydrocarbon hydroxylase (AHH) were determined in cod, haddock and whiting. The data for cod and haddock showed significantly higher levels of AHH in the livers of fish caught close to oil platforms than in those caught in areas away from oil activity, while whiting showed no such differences. The data are the first indications that the oil in the sediments around platforms may be biochemically available to fish in the area.

ANNO

06/09/1987

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ACC 2085
TYPE P
YEAR 1969
AUTH DAWES, C.J.;VAN BREEDVELD, J.F.,;
TITL BENTHIC MARINE ALGAE.

BIBL MEMOIRS OF THE HOURGLASS CRUISES, MARINE RESEARCH LABORATORY, FLORIDA
DEPARTMENT OF NATURAL RESOURCES, 1, PT. II. 47 P.
KEYW BENTHIC ALGAE HOURGLASS

ABST One hundred and fifty-seven species of marine algae including 38 species of Chlorophyta, 29 species of Phaeophyta, 85 species of Rhodophyta and 5 species of Cyanophyta had been identified from the Hourglass Cruises of the Florida Board of Conservation, Marine Research Laboratory. The collections were made on the continental shelf at depths of 6 to 73 meters. Eighteen new species for Florida were recorded.

ANNO

06/09/1987

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ACC 2166
TYPE P
YEAR 1967
AUTH DAWES, C.J.;EARLE, S.A.;CROLEY, F.C.;
TITL THE OFFSHORE BENTHIC FLORA OF THE SOUTHWEST COAST OF FLORIDA.

BIBL BULL. MAR. SCI. 17(1):211-231.

KEYW BENTHIC	ALGAE	TEMPERATURE
SALINITY	LIGHT	SEDIMENT

ABST One hundred and sixty four forms of marine algae, including 50 species and 11 varieties of Chlorophyta, 28 species and 2 varieties of Phaeophyta, 70 species and 1 variety of Rhodophyta and Sargassum were collected along the southwest coast of Florida. The area was divided into two distinct ecological zones based on the plants found and the physical data. An annotated list of species with ecological notes was presented along with abiotic parameters descriptions.

ANNO

06/09/1987

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ACC 2012

TYPE P

YEAR 1954

AUTH DAWSON, C.E.;

TITL A BIBLIOGRAPHY OF THE LOBSTER AND THE SPINY LOBSTER, FAMILIES HOMARIDAE AND
PALINURIDAE.

BIBL FLA. BD. CONSERV. PUBL. 86 P.

KEYW BIBLIOGRAPHY

SPINY LOBSTER

ABST This bibliography includes worldwide papers concerning lobsters of the families Homaridae and Palinuridae. A subject and author index is included.

ANNO

06/09/1987

.....
ACC 2086
TYPE P
YEAR 1953
AUTH DAWSON, C.E., JR.; SMITH, F.G.W.;
TITL THE GULF OF MEXICO SPONGE INVESTIGATION.

BIBL FLORIDA STATE BOARD OF CONSERVATION. TECH. SER. NO. 1, 27 P.

KEYW SPONGE TEMPERATURE SALINITY
DO NUTRIENT

ABST Thirty eight stations from Dry Tortugas to Panama City were sampled from December 1947 to October 1948 in a survey of Florida commercial sponge beds. Commercial sponges were found at 12 stations in depths from 18 to 60 feet. Although dead or damaged commercial sponges were observed at several locations, there was no evidence of the 1930 sponge disease. However, few sponges of commercial size were found at any site, and the low abundance of small commercial sponges indicated a slow recovery of the Florida sponge industry.

ANNO

06/09/1987

.....
ACC 2187
TYPE P
YEAR 1951
AUTH DAWSON, C.D., JR.; IDYLL, C.P.;
TITL INVESTIGATIONS ON THE FLORIDA SPINY LOBSTER, PANULIRUS ARGUS
(LATREILLE).

BIBL FLORIDA STATE BOARD OF CONSERVATION, TECH. SER. NO. 2. 39 P.

KEYW LIFE HISTORY	SPINY LOBSTER	MANAGEMENT
FISHERY	SPAWNING	WEIGHT
LENGTH	TAGGING	

ABST This study examined the life history of the spiny lobster, *Panulirus argus*, to provide a basis for management of the fishery. Spawning occurred from March to June, with a maximum spawning occurring in April. Data was summarized on sex ratios, weight-length and total length-tail length relationships. A tagging study demonstrated that lobsters migrated up to 125 mi/year, but that 90% more migrates less than 20 miles/year. It was concluded that the spiny lobster population probably did not decline during the study and that overfishing did not occur. Recommendations were made for changes in fishery regulations.

ANNO

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ACC 18
 TYPE
 YEAR 1981
 AUTH DE LA CRUZ, A.A.;
 TITL DIFFERENCES BETWEEN SOUTH ATLANTIC AND GULF COAST MARSHES.

IN: R.C. CAREY, P.S. MARKOVITS, AND J.B. KIRKWOOD, EDS. PROCEEDINGS OF THE U.S. FISH AND WILDLIFE SERVICE WORKSHOP ON COASTAL ECOSYSTEMS OF THE UNITED STATES. P. 10-20.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, D.C. FWS/OBS-80/59.

KEYW BIOLOGY	COASTAL WATER	COASTAL ZONE
MARSH	PRODUCTIVITY	STANDING CROP
TAXONOMY	PHYSICAL PROCESS	NUTRIENT
METEOROLOGY		

ABST The one factor that determines the biological (plant communities), ecological (primary productivity, food web, energy flow), and chemical (salinity, nutrients) differences between the South Atlantic and Gulf Coast marshes is water-the hydrological processes and hydrodynamic regimes that characterize each region. Gulf Coast marshes are developed primarily on deltaic formations constructed on alluvial deposits created by several major river systems, while the South Atlantic marshes are basically formed on estuarine and lagoonal soft silt deposits bridging the barrier islands and the mainland shorelines. Tides in the South Atlantic (a tidal dominated coast) are normally semidiurnal with fluctuations of more than 2.0 m; meteorological phenomena are more stable with fewer events of major storm surges. In the Gulf, tides are generally diurnal with maximum fluctuation of 0.3 m; but during periods of lowest fluctuations, tides can change over to very weak semidiurnal occurrences. Prevailing local weather conditions, the occurrence of seasonally changing major wind directions, high energy summer tropical storms, and Gulf basin natural oscillations complicate the hydrodynamics of the Gulf marsh system. The peculiar hydrology of the Gulf Coast (a wave dominated coast coupled with the great freshwater input dominated by the Mississippi River) influences salinity producing a more diverse vegetation structure and seasonal fluxes of material into the Gulf Coast marsh-estuary.

ANNO

06/09/1987

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ACC 419
TYPE
YEAR 1979
AUTH DE LA CRUZ, A.A.;
TITL RECENT ADVANCES IN OUR UNDERSTANDING OF SALT MARSH ECOLOGY.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-79-012.
65 PP.

KEYW	BIOLOGY	COASTAL ZONE	ECOLOGY
	ENERGY FLUX	LIFE CYCLE	MARSH
	PRODUCTIVITY	NUTRIENT	

ABST Our understanding of the ecology of coastal marshes has revolved about the role of this ecosystem as a source and reservoir of energy and nutrients, and as a vital habitat for certain life stages of a number of marine organisms. While recent advances in salt marsh ecology have emphasized the metabolic processes and material fluxes that permeate the marsh-estuary, current research developments are geared towards a better understanding of the marsh as a carbon sink. Thus, investigations of 1) marsh surface productivity, 2) below-ground dynamics, and 3) decomposition processes, may dominate future research developments in salt marsh ecology.

ANNO

06/09/1987

.....
ACC 4031

TYPE P

YEAR 1936

AUTH DE LAUBENFELS, M.W.

TITL A DISCUSSION OF THE SPONGE FAUNA OF THE DRY TORTUGAS IN PARTICULAR AND OF T
HE WEST INDIES IN GENERAL, WITH MATERIALS FOR A REVISION OF THE PORIFERA.

BIBL TORTUGAS LAB, CARNEGIE INST. WASH. (30):225 P.

KEYW BIOLOGY

ECOLOGY

SYSTEMATIC

EPIFAUNA

LIFE BOTTOM

REEF

INVERTEBRATE

MORPHOLOGY

SPONGE

ABST This monograph presents a systematic account of sponges collected near the
Dry Tortugas and other West Indian areas (coasts of Florida, the Greater an
d Lesser Antilles, the Bahamas, and Bermuda).

ANNO

06/09/1987

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ACC 646

TYPE

YEAR 1981

AUTH DEEGEN, R.; LEWIS, P.L.; VAN DEVENDER, T.;

TITL REHABILITATION OF NATURAL OYSTER REEFS DESTROYED OR DAMAGED BY NATURAL
DISASTER.

IN: J.R. KELLY, ED. SYMPOSIUM ON MISSISSIPPI SOUND. P. 44-49.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-81-007.

KEYW BIOLOGY

DISASTER

OYSTER FISHERY

REEF

REHABILITATION

RESOURCE

SOCIOECONOMIC

METEOROLOGY

DEFAUNATION

ABST

ANNO

06/09/1987

.....
ACC 190
TYPE
YEAR 1976
AUTH DEFENBAUGH, R.E.;
TITL A STUDY OF THE BENTHIC MACROINVERTEBRATES OF THE CONTINENTAL SHELF OF THE N
ORTHERN GULF OF MEXICO.

BIBL PH.D. DISSERTATION. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX.

KEYW BENTHIC COMMUNITY	BENTHIC FAUNA	BIOLOGY
COMMUNITY STRUCTURE	CONTINENTAL SHELF	TAXONOMY
INVERTEBRATE	DISTRIBUTION	ASSEMBLAGE

ABST The present study details the occurrence and distribution of the macroin- v
ertebrates of the continental shelf of much of the Gulf of Mexico. The prim
ary study area is the northern Gulf, between Corpus Christi, Texas, and Pen
sacola, Florida; some information is also provided on the fauna of the Mexi
can coast, between the mouth of the Rio Soto la Marina, Tamaulipas, and Pro
greso, Yucatan. The study is based on collections from 146 trawl samples, m
ostly collected in the depth range of 18 to 183 m. Approximately 50,000 spe
cimens were collected and processed. These represent 356 species in 261 gen
era and 161 families, and include sponges (10 species), coelenterates (41 s
pecies), worms (26 species, in 5 phyla), molluscs (116 species), arthropods
(113 species), echinoderms (30 species), ectoprocts (9 species), and uroch
ordates (11 species). Essentially all species are synoptically described, w
ith pertinent comments on distribution and natural history, and are photogr
aphically illustrated. Literature pertaining to the fauna and physical char
acteristics of the Gulf of Mexico is reviewed and discussed. Based upon the
results of the present study, the published literature, and unpublished re
ports, twelve faunal assemblages characteristic of the northern Gulf, from
Brownsville, Texas, to Tampa Bay, Florida, in the depth range of 4 to 200 m
are proposed. These assemblages are: (a) inner shelf assemblage, Texas-Lo
uisiana shelf (4-20 m); (b) pro-delta fan assemblage (4-20 m); (c) pro-delt
a sound assemblage (4-20 m); (d) inner shelf assemblage, West Florida shelf
(4-20 m); (e) intermediate shelf assemblage, Texas-Louisiana shelf (20-60

ANNO

06/09/1987

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ACC 2397
TYPE P
YEAR 1979
AUTH DEFELICE, D.;LYNS, G.;
TITL BIOTICA AND ABIOTIC PARAMETERS AFFECTING DIVERSITY IN MODERN AND ANCIENT BENTHIC DIATOM ASSEMBLAGES OF FLORIDA.

BIBL FLA. SCI. 42(SUPPL.):44.

KEYW MONROE	SUBSTRATE	LIGHT
SEDIMENT	PHYTOPLANKTON	ALGAE
NUTRIENT	SILICATE	

ABST A study of benthic diatom communities in Florida Bay showed that diatom diversity is determined by various biotic and abiotic parameters, including substrate, light quality, sediment particle size, and distance from land. In Florida Bay diatoms are common in surface sediment, but absent immediately below the surface horizon; sponge spicules are the only siliceous biogenic component in the sediment. Due to the undersaturation of siliceous material in the water column and at the water sediment interface in Florida Bay, diatoms are believed to dissolve soon after death, allowing rapid recycling and re-utilization of silica.

ANNO

06/09/1987

.....
ACC 2399
TYPE P
YEAR 1978
AUTH DEFELICE, D.R.; LYNTS, G.W.;
TITL BENTHIC MARINE DIATOM ASSOCIATIONS: UPPER FLORIDA BAY (FLORIDA) AND ASSOCIATED SOUNDS.

BIBL J. PHYCOL. 14:25-33.

KEYW MONROE	CARBONATE	ASSEMBLAGE
SEDIMENT	PHYTOPLANKTON	SEAGRASS

ABST Studies were conducted on the tropical marine diatom flora of Florida Bay. Models of the diatom associations found in upper Florida Bay and adjoining sounds were constructed, and 4 distinct associations were defined. Two associations were epiphytic, occurring on *Thalassia testudinum* and two were epipelagic, occurring on carbonate mud substratum. The majority of the 161 species identified were present in both the epiphytic and epipelagic assemblages. The epipelagic assemblage was found to be significantly more diverse than was the epiphytic assemblage. A general trend of increased diversity away from terrestrial environs, toward more open areas of water in both the epipelagic and epiphyton was noted.

ANNO

06/09/1987

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ACC 2400
TYPE P
YEAR 1980
AUTH DEFELICE, D.R.;LYNTS, G.W.;
TITL EPIPHYTIC DIATOMS AS R-SELECTORS IN FLORIDA BAY, FLORIDA.

BIBL FLA. SCI. 43(SUPPL):23.

KEYW MONROE	LIFE HISTORY	PRODUCTIVITY
SEAGRASS	PHYTOPLANKTON	

ABST The benthic diatom *Cocconeis placentula*, an epiphyte on *Thalassia testudinum* grass blades in Florida Bay, was found to have the characteristic life history patterns of the theoretical 'r-selected' endpoint species. Individuals of the species are small, live in an unpredictable environment, and have high productivity and low equitability. The ephemeral nature of the seagrass bed requires periodic recolonization. Maximum energy in *C. placentula* is delegated for reproduction with the production of many small offspring, such that population increase is controlled solely by the maximum intrinsic rate of natural increase (r_{max}).

ANNO

06/09/1987

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ACC 2087
TYPE P
YEAR 1980
AUTH DEHN, P.F.;
TITL GROWTH AND REPRODUCTION IN LUIDIA CLATHRATA (SAY) (ECHINODERMATA: ASTEROIDE
A).

BIBL PH.D. DISSERTATION. UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL.

KEYW GROWTH REPRODUCTION ECHINODERMATA
 TEMPERATURE

ABST Growth and reproduction of *Luidia clathrata* were studied in populations from Tampa Bay and Charlotte Harbor, Florida. The gametogenic cycle of both populations is described and 5 stages of gametogenesis are identified. Feeding experiments conducted in the laboratory at room and environmental temperatures during reproductive and nonreproductive seasons revealed changes in gonadal and digestive gland indices. Relationships between growth and resorption of body reserves and gonads were determined.

ANNO

06/09/1987

.....
ACC 2542
TYPE P
YEAR 1963
AUTH DEPALMA, J.R.;
TITL MARINE FOULING AND BORING ORGANISMS OFF FORT LAUDERDALE, FLORIDA.

BIBL INFORMAL MANUAL REPORT NO. 0-70-62, SPONSORED BY NAVOCEANA AND THE U.S.
NAVAL ORDINANCE LABORATORY, 28 P.

KEYW	FOULING	GROWTH	DEPTH
	TEMPERATURE	SALINITY	CURRENT

ABST Growth of marine fouling organisms was observed on test panels exposed at this site and the performance of copperbase antifouling paint under natural conditions was evaluated. Fouling growth occurred throughout the year, with individual species showing peaks of intensity. Organisms attached throughout the water column, and maximum density of attachment occurred at 27 m and generally decreased with depth.

ANNO

06/09/1987

.....
ACC 4200

TYPE P

YEAR 1981

AUTH DETTMANN, E.H.;

TITL AQUATIC TRANSPORT OF SINKING PARTICULATES: MODEL RESULTS AND IMPLICATIONS F
OR DESIGN OF PLUME SAMPLING PROGRAMS AT OFFSHORE OIL AND GAS WELLS AND OTHE
R DISCHARGES.

BIBL DEV. ENVIRON. MODELL 1:157-161.

KEYW TRANSPORT

OFFSHORE DRILLING

DRILING MUD

MODEL

SUSPENDED

DRILL CUTTING

CURRENTS

SEDIMENTS

ABST

ANNO

06/09/1987

.....

ACC 685
TYPE
YEAR 1980
AUTH DEWALD, O.E.;
TITL SEVERE STORM AND HURRICANE IMPACTS ALONG THE GULF AND LOWER ATLANTIC COASTS

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA. 10 PP.

KEYW COASTAL WATER HURRICAN DAMAGE HURRICANE
METEOROLOGY TROPICAL STORM

ABST

ANNO

06/09/1987

.....
ACC 2292
TYPE P
YEAR 1977
AUTH DEWITT, T.;
TITL SPATIAL AND TEMPORAL VARIATION IN THE STRUCTURE OF A MANGROVE SWAMP BENTHIC
COMMUNITY.

BIBL ENVIRONMENTAL STUDY REPORT. NEW COLLEGE AT UNIVERSITY OF SOUTH FLORIDA,
TAMPA, FL.

KEYW SARASOTA	INVERTEBRATE	DISTRIBUTION
DIVERSITY	SEDIMENT GRAIN SIZE	SALINITY
DO	TEMPERATURE	

ABST A study of benthic macroinvertebrates was conducted in a mangrove forest on
Siesta Key, Florida. Samples were collected bimonthly from 5 stations fr
om May 1976 through May 1977. Data were analyzed for faunal similarity as
well as distribution, density, diversity, and associations. Seasonal trends
in granulometry and water quality parameters were identified. Species lis
ts of polychaeters, mollusce, crustacea, and ophiuroids are included.

ANNO

06/09/1987

.....

ACC 2293

TYPE P

YEAR 1975

AUTH DEWITT, T.;EVARTS, J.;

TITL A SURVEY OF THE BENTHIC MACROINVERTEBRATES IN THE BAYSIDE MANGROVE SWAMP.

BIBL NEW COLLEGE AT UNIV. ST. FLA., ENVIR. STUD. REPT.

KEYW SARASOTA

INVERTEBRATE

BACTERIA

ABST The structure of the macroinvertebrate communities at six stations in a Sarasota Bay mangrove swamp is described. It was determined that where the mangroves were the thickest, the detritus was most abundant. Most of the decomposition was found to take place at the microbial level by bacteria. Some macroinvertebrates aided in the decomposition process, while others preyed upon these decomposers.

ANNO

06/09/1987

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ACC 432
TYPE
YEAR 1982
AUTH DIAZ, R.J.;
TITL HABITAT SUITABILITY INDEX MODELS: JUVENILE ATLANTIC CROAKER.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS OBS-82-10.21 22 PP.

KEYW	ECOLOGY	FISH	MANAGEMENT
	RESOURCE	GEOLOGY	HABITAT
	LIFE HISTORY	MODEL	

ABST

ANNO

06/09/1987

.....

ACC 1091
TYPE
YEAR 1983
AUTH DIAZ, F.R.;
TITL SEAMAP MARINE DIRECTORY.

BIBL GULF STATES MARINE FISHERIES COMMISSION, PASCAGOULA, MS.

KEYW BIOLOGY COMMERCIAL FISHERY FISHERY
RECREATION

ABST The Southeast Area Monitoring and Assessment Program (SEAMAP) is a cooperative state/Federal/university program for collection, management, and dissemination of fishery-independent data (data collected without direct reliance on any commercial or recreational fishery) and information on the southeast region.

ANNO

06/09/1987

.....
ACC 416

TYPE

YEAR 1979

AUTH DINDO, J.;MACGREGOR, R.;CROZIER, G.;

TITL ANALYSIS OF REPRODUCTIVE HORMONE AND PLASMA LIPID LEVELS ASSOCIATED WITH THE
MIGRATION OF THE STRIPED MULLET, MUGIL CEPHALUS L.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-79-007.
9 PP.

KEYW BIOLOGY

COASTAL WATER

FISH

HORMONE

LIPID

MULLET

REPRODUCTION

ABST

ANNO

06/09/1987

.....
ACC 4243

TYPE P

YEAR 1984

AUTH DITTON, R.B.;AUYONG, J.;

TITL FISHING OFFSHORE PLATFORMS CENTRAL GULF OF MEXICO: AN ANALYSIS OF RECREATIO
NAL AND COMMERCIAL FISHING USE AT 164 MAJOR OFFSHORE PETROLEUM STRUCTURES.

BIBL MINERALS MANAGEMENT SERVICE, METAIRIE, LA (USA). GULF OF MEXICO OCS
REGULATORY OFFICE. P. 157.

KEYW COMMERCIAL FISHING RECREATIONAL FISHING ARTIFICIAL REEF
OFFSHORE PLATFORM

ABST This monograph reports on offshore fishing patterns derived from data colle
cted in 1980-1981 on the fishing use directly associated with several hundr
ed oil and gas production platforms located from 3 to more than 100 miles o
ff the coast of Louisiana. Insight is provided into the relative abundance
of platform fishing activity by major fishing group (private boats, charte
r and party boats, scuba boats, commercial boats, and offshore workers), ho
me state of boat fishermen, where they go (depth and distance) when they fi
sh, how they fish, and what species constitute their principal catch. By s
ubdividing the study area into three analysis zones, the investigation effe
ctively shows that demographics, transportation, access, shelf characteris
tics, and the interrelationship of these factors influence the amount
and location of offshore "rig" fishing.

ANNO

06/09/1987

.....
ACC 778
TYPE
YEAR 1961
AUTH DOBIE, J.L.; OGREN, L.H.; FITZPATRICK, J.F.;
TITL FOOD NOTES AND RECORDS OF THE ATLANTIC RIDLEY TURTLE (LEPIDOCHELYS KEMPI) FROM LOUISIANA.

BIBL COPEIA 1:109-110.

KEYW REPTILIA	BIOLOGY	ECOLOGY
FEEDING HABIT	HERPETOFAUNA	SPECIES COMPOSITION
TURTLE		

ABST The diets of two specimens of the atlantic Ridley Turtle from the Tulane University Museum were examined and found to contain molluscs and crustacean fragments. All specimens on this study were collected from Louisiana coastal waters.

ANNO

06/09/1987

.....
ACC 2401
TYPE P
YEAR 1960
AUTH DOBKIN, S.;
TITL THE EARLY LIFE HISTORY OF THE PINK SHRIMP PENAEUS DUORARUM BURKENROAD FROM
FLORIDA WATERS.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL. 120 P.

KEYW MONROE LIFE HISTORY PINK SHRIMP
LARVAL

ABST Between January and December 1959 plankton samples were taken from Florida Bay and Dry Tortugas areas in order to study the larvae of penaeid shrimp. The first six larval stages were studied in the laboratory where eggs were hatched. Remaining stages were examined from the field samples. Stages described are: egg, five naupliar; three protozoal, three mysis, and two postlarval. Comparison of *Penaeus duorarum* and *P. setiferus* larvae revealed several morphological differences. Also discussed are the commercial importance of shrimp and aspects of penaeid life history.

ANNO

06/09/1987

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ACC 631

TYPE

YEAR 1981

AUTH DOLTON, G.L.;CARLSON, K.H.;CHARPENTIER, R.R.;COURY, A.B.;ET AL.;

TITL ESTIMATES OF UNDISCOVERED RECOVERABLE CONVENTIONAL RESOURCES OF OIL AND GAS
IN THE UNITED STATES.

BIBL U.S. GEOLOGICAL SURVEY, GEOLOGICAL SURVEY CIRCULAR 860. 87 PP.

KEYW OIL

RESOURCE

SOCIOECONOMIC

ABST In 1980, the U.S. Geological Survey (USGS) reappraised the undiscovered recoverable conventional resources of crude oil and natural gas in the United States. The assessments of undiscovered recoverable oil and gas were based fundamentally upon analysis and review of the province petroleum geology, exploration history, volumetric-yield determinations, finding-rate studies, and structural analyses. Because of the uncertainty in estimating undiscovered resources, the reported quantities include a range of values that correspond to different probability levels. Subjective probability procedures were used in their derivation. The undiscovered recoverable conventional oil resources for the United States area estimated to range from 64.3 to 105.1 billion barrels with a mean estimate of 82.6 billion barrels. Assessed gas resources range from 474.6 to 739.3 trillion cubic feet with a mean estimate of 593.8 trillion cubic feet. Each range corresponds to 95 percent and 5 percent probabilities of more than the respective amount. When compared with the USGS estimates of 1975, the mean estimate of oil for the entire United States has changed little, whereas the mean estimate of natural gas has increased. In making such a comparison, however, the reader should recognize that resources of the continental slopes are included in the current assessment, but were not included in the 1975 report.

ANNO

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ACC 4032
 TYPE P
 YEAR 1978
 AUTH DOWD, C.E.;
 TITL ABUNDANCE AND DISTRIBUTION OF BOTHIDAE (PISCES, PLEURONECTIFORMES) LARVAE I
 N THE EASTERN GULF OF MEXICO, 1971-72 AND 1973.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL. 107 P.

KEYW BIOLOGY	DEMERSAL FISH	EPIFAUNA
FLATFISH	ICHTHYOPLANKTON	REPRODUCTION
DISTRIBUTION	SEASONALITY	SPAWNING AREA
WATER COLUMN	FISH	

ABST Larval flatfishes of the family Bothidae are abundant on the continental shelf off the west coast of Florida. They were studied from ichthyoplankton collected in ten cruises to the eastern Gulf of Mexico in 1971-72 and 1973.

The abundance and distribution of each major species was determined, differences in abundance between the two years were compared, and oceanographic factors affecting abundance and distribution were examined. An estimate of the decrease in abundance of larvae as growth occurred (apparent mortality) was made for important species. The larvae of four species, *ETROPUS RIMOSUS*, *CITHARICHTHYS MACROPS*, *C. CORNUTUS* and *C. GYMNORHINUS*, were described.

Spawning by bothids tended to differ by depth and/or season. *SYACIUM PAPILLOSUM* larvae were the most abundant bothid; cruise means ranged from 1.7 to 23.9 larvae under 10 m² sea surface. They were widely distributed on the shelf between 30 and 100 m depths in spring-summer but only at the southernmost stations in winter. *BOTHUS ROBINSI* and *ETROPUS RIMOSUS* were the next most abundant larval bothids. *BOTHUS ROBINSI* had a distribution similar to that of *S. PAPILLOSUM* by area and season but *B. ROBINSI* larvae have a smaller mouth, suggesting a possible resource partitioning through differing feeding habits. *ETROPUS RIMOSUS* larvae were most abundant in winter between 20 and 60 m depths. *CITHARICHTHYS* species were less abundant. *CITHARICHTHYS MACROPS* larvae were most abundant in spring and again in fall at depths < 30 m. *CITHARICHTHYS CORNUTUS* and *C. GYMNORHINUS* occurred offshore, usually beyond the 50 m isobath, and showed no seasonality.

ANNO

06/09/1987

.....
ACC 262
TYPE
YEAR 1980
AUTH DOYLE, L.J.; SPARKS, T.N.;
TITL SEDIMENTS OF THE MISSISSIPPI, ALABAMA, AND FLORIDA (MAFLA) CONTINENTAL SHELF.

BIBL J. SEDIMENT. PETROL. 50(3):905-916.

KEYW CONTINENTAL SHELF	GEOLOGY	MINERALOGY
SEDIMENT DISTRIBUTION	SEDIMENT	MAFLA
CIRCULATION	CURRENTS	

ABST The eastern Gulf (MAFLA) continental margin may be conveniently divided into two parts of opposing history and character. West of Cape San Blas lies the eastern limb of the Gulf Coast geosyncline whose surface expression is a clastic sand body, called the MAFLA Sand Sheet, grading westward into the muds of the Mississippi pro-delta. These sediments have a clay mineral suite dominated by smectite. East of Cape San Blas lies the West Florida Margin, a sequence of carbonate and evaporitic rocks which has been cut off from a major clastic source since Jurassic time. The surface expression of this sequence is the West Florida Sand Sheet, predominantly a patchy veneer of shell hash and foraminiferal, algal, and even oolitic sands which is subjected to periodic reworking by frontal system storms and hurricanes. Kaolinite dominates its clay mineralogy. Seaward of the carbonate sands lies the West Florida Lime Mud facies, slope sediments composed of planktonic foraminifera and coccoliths. Inshore of the carbonate sands and separated from them by a zone of mixed composition lies a mature quartz sand, which also makes up the beaches of Southwest Florida - West Florida shelf quartz sands appear to have been deposited at lower sea level stands and to have been transported back and forth with no net drift in a longshore current system which changes seasonally from north to south. Clay mineralogy in portions of the MAFLA region shows distinct changes in composition over a period of a year in the benthos and over periods as short as a few hours in the water column. These changes reflect contribution from two distinct provenances. Benthic

ANNO

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ACC 275
 TYPE
 YEAR 1981
 AUTH DOYLE, L.J.;FELDHAUSEN, P.H. ;
 TITL BOTTOM SEDIMENTS OF THE EASTERN GULF OF MEXICO EXAMINED WITH TRADITIONAL AN
 D MULTIVARIATE STATISTICAL TECHNIQUES.

BIBL MATHEMATICAL GEOLOGY. 13(2):93-117.

KEYW CLAY MINERALOGY GEOLOGY CONTINENTAL SHELF
 SEDIMENT DISTRIBUTIO SEDIMENT STATISTICAL ANALYSIS

ABST Several multivariate statistical analyses were performed upon sediment textural and chemical data derived from a four-year study of the surface sediments of the eastern Gulf of Mexico continental margin. The results were compared with the surface sediment facies map and the generalized dynamical patterns deduced by Doyle and Spark (1980) using traditional sediment textural and compositional parameters and single moment method statistics. The addition of multivariate techniques suggested relationships among variables which were subtle and not otherwise readily apparent. Mapping of Q-mode clusters based upon sediment texture alone showed a patchy distribution of sediment classes within the traditional descriptive facies. A seasonal variation in sediment texture at several stations was also revealed which we have attributed to the reworking of the bottom and sediment transport by hurricanes and winter frontal storm systems which sweep across the shallow shelf. Based upon first-order trend surface analysis Q-mode ordination and stepwise linear regression analysis we have interpreted that total organic carbon content, not the amount of fine grained sediment present nor the clay mineralogy, is the most important parameter affecting the distribution of the trace metals Ba, Cr, Cu, Fe, Pb, and Zn. These relationships suggest to us that organic complexing with trace metals is important in the eastern Gulf margin sediments. Finally a strong relationship between the group of trace metals Ba, Pb, Zn, Cd, and CaCO₃ shown by these analyses may be the result of biological uptake in the deeper portions of the study area and/or incorporation

ANNO

06/09/1987

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ACC 276

TYPE

YEAR 1977

AUTH DOYLE, L.J.;BIRDSALL, B.;HAWARD, G.;LEHMAN, L.;SZYDIK, S.;WARREN, E.;

TITL BASELINE MONITORING STUDIES, MISSISSIPPI, ALABAMA, FLORIDA OUTER CONTINENTAL SHELF, 1975-1976.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, DC. 14 P.

KEYW CLAY MINERALOGY

GEOLOGY

CONTINENTAL SHELF

SEDIMENT DISTRIBUTIO

SEDIMENT

MAFLA

ABST

ANNO

06/09/1987

.....
ACC 2263
TYPE P
YEAR 1964
AUTH DRAGOVICH, A.;KELLY, J.A., JR.;
TITL ECOLOGICAL OBSERVATIONS OF MACROINVERTEBRATES IN TAMPA BAY, FLORIDA
1961-1962.

BIBL BULL. MAR. SCI. GULF CARIBB. 14(1):74-102.

KEYW INVERTEBRATE	SPONGE	CRUSTACEAN
ECHINODERM	TEMPERATURE	SALINITY
MOLLUSC	PINK SHRIMP	BLUE CRAB
ANNELID	ECHINODERM	

ABST A checklist of macroinvertebrates observed in Tampa Bay, which included 78 genera and 82 species of sponges, annelids, sipunculids, decapod crustaceans, gastropods, pelecypods, cephalopods, echinoderms and ascidians, was presented. The occurrence, distribution, and relation to bottom type of these organisms were discussed. The observed temperature and salinity ranges for most of the organisms were given.

ANNO

06/09/1987

.....
ACC 355
TYPE
YEAR 1965
AUTH DRENNAN, K.L.;
TITL SURFACE CIRCULATION IN THE NORTHEASTERN GULF OF MEXICO.

BIBL GULF COAST RESEARCH LABORATORY, OCEANOGRAPHY SECTION, OCEAN SPRINGS, MS. TECHNICAL REPORT NO.1. 116 PP.
KEYW CIRCULATION COASTAL WATER PHYSICAL PROCESS
WATER MASS

ABST

ANNO

06/09/1987

.....

ACC 356
TYPE
YEAR 1968
AUTH DRENNAN, K.L.;
TITL HYDROGRAPHIC STUDIES IN THE NORTHEAST GULF OF MEXICO.

BIBL GULF SOUTH RESEARCH INSTITUTE, ENVIRONMENTAL SCIENCE AND ENGINEERING LABORA
TORIES, NEW IBERIA, LA. TECHNICAL REPORT 68-0-1. 111 PP.
KEYW CIRCULATION CONTINENTAL SHELF CURRENTS
HYDROGRAPHY PHYSICAL PROCESS RIVER DISCHARGES

ABST

ANNO

06/09/1987

.....
ACC 854
TYPE
YEAR 1973
AUTH DREYER, C.F.;
TITL SOME ASPECTS OF DISSOLVED AND PARTICULATE ORGANIC CARBON IN NEARSHORE ENVIR
ONMENTS OF THE GULF OF MEXICO.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL 88 P.

KEYW CARBON SALINITY ORGANIC CARBON
SUSPENDED

ABST 32 stations in the Gulf of Mexico between the Mississippi River and south F
lorida were sampled 4 times during 1972. Water samples were analyzed with a
total carbon analyzer for dissolved and particulate organic carbon.

ANNO

06/09/1987

.....
ACC 2506

TYPE P

YEAR 1976

AUTH DUERR, E.O.;

TITL OXYGEN CONSUMPTION STUDIES ON THE PINK SHRIMP, PENAEUS DUORARUM, AS A FUNCT
ION OF ACTIVITY, SIZE, WATER TEMPERATURE, AND FLOW, WITH NOTES ON STARVATIO
N AND SAND SUBSTRATE EFFECT.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL. 119 P.

KEYW DADE
GROWTH

PINK SHRIMP
DISSOLVED OXYGEN

TEMPERATURE
STRESS

ABST Measurements of O₂ consumption rates of *Penaeus duorarum* revealed an active
rate at night and a resting rate during the day. Water flow, temperature,
specimen size, molting rates, growth rates, and death rates were related t
o O₂ consumption.

ANNO

06/09/1987

.....
ACC 800
TYPE
YEAR 1979
AUTH DUGAS, R.;GUILLORY, V.;FISCHER, M.;
TITL OIL RIGS AND OFFSHORE SPORT FISHING IN LOUISIANA.

BIBL FISHERIES 4(6):2-10.

KEYW ARTIFICIAL HABITAT DRILLING RIG GAS
OIL SOCIOECONOMIC SPORT FISHERY
STRUCTURE

ABST The authors offer a discussion of the function of oil production platforms as artificial reefs for sport fishing. They discuss the effectiveness of the structures as attractive habitat for numerous, otherwise locally unknown sports species. As well, the authors subdivide the oil rigs and associated finfish species into nearshore "green water" and offshore "blue water" assemblages, and present a summary of the dominant and/or most desirable species.

ANNO

06/09/1987

.....
ACC 1056
TYPE
YEAR 1976
AUTH DUKE, T.W.;
TITL PESTICIDES IN AQUATIC ENVIRONMENTS; AN OVERVIEW.

IN: M.A.Q. KHAN, ED. PESTICIDES IN AQUATIC ENVIRONMENTS. P. 1-8.

BIBL PLENUM PRESS, NEW YORK, NY.

KEYW BIOACCUMULATION BIOLOGY BIOMAGNIFICATION
 ECOLOGY PESTICIDE TOXICOLOGY

ABST The fate and transportation of pesticides in the aquatic environment are discussed. The food chain relationships and biomagnification through the food chain are diagrammed.

ANNO

06/09/1987

.....

ACC 2223
TYPE P
YEAR 1977
AUTH DUNCAN, J.L.;
TITL SHORT-TERM EFFECTS OF STORM WATER RUNOFF ON THE EPIBENTIC COMMUNITY OF A
NORTH FLORIDA ESTUARY (APALACHIOCOLA, FLORIDA).

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW STORM	BENTHIC COMMUNITY	BIOMASS
ABUNDANCE	SEDIMENT	GRAIN SIZE
SALINITY	TEMPERATURE	DO
BLUE CRAB	RIVER DISCHARGE	

ABST The short term effects of stormwater runoff on benthic community structure was investigated in Apalachicola Bay, Florida. Acidic runoff resulted in water with a low pH, high color, lowered dissolved oxygen, and decreased salinity. During periods of runoff benthic community biomass and abundance decreased significantly. Dominant species, *Anchoa mitchelli*, *Cynoscion a renarius*, *Penaeus setiferus*, usually avoided areas affected by runoff, though certain species, such as juvenile *Callinectes sapids*, may be attracted to these areas.

ANNO

06/09/1987

.....
ACC 2402
TYPE P
YEAR 1977
AUTH DUSTAN, P.;
TITL VITALITY OF REEF CORAL POPULATIONS OFF KEY LARGO, FLORIDA: RECRUITMENT AND
MORTALITY.

BIBL ENVIRON. GEOL. 2:51-58.

KEYW MONROE	REEF	CORAL
RECRUITMENT	MORTALITY	SEDIMENT

ABST A study was conducted to gather data to provide information for a predictive statement about the future of reefs in the Keys area of southern Florida. Physical damage, algal destruction, animal predation, sediment damage, and disease were found to be the 5 major causes of coral mortality. Sediment damage occurs when particles are large and the sedimentation rate is high, and the coral cannot cleanse itself. Furthermore, algae and bacteria that become established on corals can expand over the colony, smothering it. Other examples of destruction were given and aspects of population growth and colonization were discussed.

ANNO

06/09/1987

.....
ACC 2403
TYPE P
YEAR 1967
AUTH EARLEY, C.F.;
TITL THE SEDIMENTS OF CARD SOUND, FLORIDA.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW MONROE SEDIMENT GRAIN SIZE

ABST The distribution of textural and compositional characteristics of sediment samples from Card Sound, Florida was determined from collections made during the spring and summer of 1966. Comparisons of the sediments from the sound with those of the adjacent shelf revealed considerable differences in sediment composition and grain size. Trends in the distribution of grain size, sorting, and composition are cited for sediments from both the sound and shelf.

ANNO

06/09/1987

.....
ACC 832

TYPE

YEAR 1967

AUTH EDWARDS, J.C.;

TITL PRODUCTION OF THE MARINE SHRIMP (PENAEUS FLUVIATILIS SAY AND PENAEUS AZTECUS
S IVES) IN TEXAS AND LOUISIANA WATERS, AND THE RELATION OF RAINFALL AND FRE
SH WATER DRAINAGE.

BIBL MASTER'S THESIS. UNIVERSITY OF MISSISSIPPI, OXFORD, MS. 43 PP.

KEYW BENTHIC FAUNA

PRECIPITATIOAN

RIVER DISCHARGE

BROWN SHRIMP

SALINITY

WATER QUALITY

FISHERY

SHRIMP FISHERY

ABST The relationship between rainfall and catches of white and brown shrimp was
studied between 1927 and 1964 off the coast of Texas and Louisiana. Any co
rrelation between rainfall amount and catches of either species was documen
ted as well as a relationship between catch size and river discharge.

ANNO

06/09/1987

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ACC 890
TYPE
YEAR 1975
AUTH EDWARDS, N. ;
TITL ESCAMBIA BAY PHYSICAL OCEANOGRAPHY.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL. 100 PP.

KEYW CURRENTS SALINITY TEMPERATURE
PHYSICAL OCEANOGRAPH

ABST Data on salinity, temperature and current speed and direction were collected from 18 stations in Escambia Bay, Florida from July, 1973 to November, 1973. Measurements were made at 2 foot intervals from surface to bottom.

ANNO

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ACC 2088
TYPE U
YEAR 1975
AUTH EG&G ENVIRONMENTAL CONSULTANTS (WALTHAM, MA);
TITL PHYSICAL, CHEMICAL LAND BIOLOGICAL INVESTIGATIONS IN THE GULF OF MEXICO. P
REPAIRED FOR E>I DUPONT DE NEMOURS & CO., INC. WILMINGTON, DE.

BIBL

KEYW	BIOLOGICAL	PHYSICAL	CHEMICAL
	BENTHIC	TEMPERATURE	SALINITY
	DO	CURRENTS	LIGHT
	NUTRIENT	METAL	BASELINE STUDY

ABST These investigations were designed by DuPont and the EPA to provide baseline biological, physical, and chemical data at a proposed disposal site and at continental shelf stations. Plankton and benthos species (only at shelf stations) were enumerated. Annelids represented the greatest percentage of organisms collected (36.6%). Arthropods were second (22.9%), followed by molluscs (14.6%), cnidarians (8.7%), echinoderms (6.4%), ectoprocts (5.5%), chaetognaths (3.7%) and lower chordates (1.8%). Further analysis of benthos was not attempted because of the low numbers of species collected in the single collection reported.

ANNO

06/09/1987

.....
ACC 2215
TYPE P
YEAR 1972
AUTH EIDEMILLER, J.A.;
TITL MARINE MEADOWS OF FLORIDA: A LOOK AT TURTLE GRASS COMMUNITIES.

BIBL BULL. AM. LITT. SOC. 7(4):22-25

KEYW SEAGRASS TEMPERATURE MOLLUSC
 CRUSTACEAN FISH

ABST This report describes the diverse and abundant fauna thriving in a Florida seagrass community. Among those species described are sea horses, octopi, hermit crabs, horseshoe crabs, scallops, and juvenile commercial and sport fishes.

ANNO

06/09/1987

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ACC 2216
TYPE P
YEAR 1972
AUTH EIDEMILLER, J.A.
TITL SIGNIFICANT ASSOCIATIONS OF THE MOTILE EPIBENTHOS OF THE TURTLE GRASSBEDS
OF ST. JOSEPH'S BAY, FLORIDA.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW BEHAVIOR FISH INVERTEBRATE
SEAGRASS

ABST The technique (devised by E.W. Fager) for the determination of statistically significant recurrent groups of species was applied to quantitative samples of the motile epibenthic fauna of the turtle grassbeds on St. Josephs Bay. An attempt was made to correlate the results of this procedure with behavioral interactions as they were observed in the field by means of SCUBA diving. Seventy species of small fishes and invertebrates were collected in the first sample. Sixty two species were collected in the second sample. Recurrent groups were discussed in terms of (1) affinities between groups; (2) relationships of associates to their groups; (3) differences and similarities within the larger recurrent groups; (4) possible significance of the two species groups, and characteristic species not grouped. A comparison of the two seasonal samples was made.

ANNO

06/09/1987

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ACC 2196
TYPE P
YEAR 1976
AUTH EISEMAN, N.J.; BENZ, M.C.; SERBOUSEK, D.E.;
TITL STUDIES OF THE BENTHIC PLANTS OF THE INDIAN RIVER REGION.

BIBL IN: HARBOR BRANCH CONSORTIUM INDIAN RIVER COAST. ZONE STUDY, 1975-1976.
CHAPTER 6. ANNUAL REPORT VOLUME 1.

KEYW BENTHIC ALGAE DRIFT ALGAE
COMMUNITY CONTINENTAL SHELF MODEL

ABST Two hundred and four specific and subspecific taxa of marine algae were identified (55 Chlorophyta, 23 Phaeophyta and 126 Rhodophyta) primarily from the drift algae community and from the continental shelf at depths greater than 30 m. Fifteen new geographic records and 3 new taxa are reported. Sixty three species of algae were found in the drift community. A preliminary model of the seasonal dynamics of *Halodule wrightii* based on data from 1974-1975 was tested for predictive capability. The model successfully predicted the standing crop in about 50% of the cases for a partial year's data from 1976. Partial and multiple correlation coefficients are given for effects of environmental parameters on biomass of *H. wrightii*.

ANNO

06/09/1987

.....

ACC 784
TYPE
YEAR 1972
AUTH EL-SAYED, S.Z.;
TITL PRIMARY PRODUCTIVITY AND STANDING CROP OF PHYTOPLANKTON IN THE GULF OF MEXI
CO.

IN: V.C. BUSHNELL, ED. CHEMISTRY, PRIMARY PRODUCTIVITY AND BENTHIC ALGAE
OF THE GULF OF MEXICO, SERIAL ATLAS OF THE MARINE ENVIRONMENT, FOLIO 22.
BIBL AMERICAN GEOGRAPHIC SOCIETY, NY. P. 8-13.

KEYW BIOLOGY BIOMASS PHYTOPLANKTON
PRIMARY PRODUCTIVITY STANDING CROP CHLOROPHYLL
ALGAE

ABST This work is a general overview of phytoplankton in the Gulf of Mexico. Mea-
surements on primary productivity, biomass, and standing crop were made. D
ata is presented on average chlorophyll (mg/m³) and average C(14) uptake (m
gC/m(3)/hr).

ANNO

06/09/1987

.....
ACC 2264

TYPE P

YEAR 1961

AUTH ELDRED, B.; INGLE, R.M.; WOODBURN, K.D.; HUTTON, R.F.; JONES, H.;

TITL BIOLOGICAL OBSERVATIONS ON THE COMMERCIAL SHRIMP, PENAEUS DUORARUM BURKENRO
AD, IN FLORIDA WATERS.

BIBL FLORIDA STATE BOARD OF CONSERVATION, PROFESSIONAL PAPER SERIES NUMBER 3.
139 P.

KEYW	BIOLOGY	DEPTH	DEVELOPMENT
	MIGRATION	BEHAVIOR	TEMPERATURE
	SALINITY	WIND	TIDE
	PINK SHRIMP		

ABST Since 1955 the Florida State Board of Conservation has conducted comprehensive studies on the biology of *Penaeus duorarum*. Collected specimens were combined into three size groups: 1) specimens smaller than 50 mm, which include the very small post-larvae and young juveniles; 2) specimens between 50 mm and 79 mm, which include older juveniles and subadults; and 3) specimens 80 mm and larger, which are mostly adults. The average size of the shrimp relative to depth was discussed as was the relation of temperature to distribution, spawning, and population densities. Other biological aspects covered in this report include sex size disparity, rate of sexual development, migration, behavior, diet, growth and some parasites of the shrimp.

ANNO

06/09/1987

.....

ACC 2508

TYPE P

YEAR 1972

AUTH ELDRED, B.;FUTCH, C.R.;INGLE, R.M.;

TITL STUDIES OF JUVENILE SPINY LOBSTERS, PANULIRUS ARGUS, IN BISCAYNE BAY, FLORIDA.

BIBL FLORIDA DEPARTMENT OF NATURAL RESOURCES MARINE RESEARCH LABORATORY,
SPECIAL SCIENTIFIC REPORT NO. 35. 15 P.

KEYW DADE SPINY LOBSTER RECRUITMENT
SEAGRASS

ABST A total of 1,464 juvenile spiny lobsters (*Panulirus argus*), ranging from 6 to 75 mm carapace length (CL), were captured in commercial bait trawls from Biscayne Bay, Florida during 1968-1969. Habitats consisted of sand/mud bottoms with dense stands of *Thalassia testudinum*, *Diplanthera (Halodule) wrightii*, *Acetabularia crenulata*, *Laurencia obtusa*, *Penicillus capitatus*, and *Udotea conglutinata*. Only immature lobsters were associated with inshore sand/mud, alga/phanerogam habitat. Small juveniles (6-10 mm CL) were present year round, with recruitment maxima in spring and fall. They grew 5 mm CL per month during their 9 to 10 months in the nursery.

ANNO

06/09/1987

.....

ACC 4239

TYPE P

YEAR 1976

AUTH ELVERS, D.;JOHNSTON, J.B.;

TITL IDENTIFICATION AND MAPPING OF FISHING BANKS ON THE OUTER CONTINENTAL SHELF
AND THE GULF OF MEXICO.

BIBL CARIBBEAN FISHERIES INSTITUTE, MIAMI, FL, USA 35-48.

KEYW FISHERY

FISH

DISTRIBUTION

ZOOGEOGRAPHY

ABST

ANNO

06/09/1987

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ACC 4297

TYPE P

YEAR UNKN

AUTH ELVERS, D.J.;REBMAN, J.;LEHMAN, J.;MOORE, R.;

TITL NEW ENVIRONMENTAL MAPS FOR GULF OF MEXICO OCS PROGRAMS.

BIBL

KEYW GEOLOGY

CONTINENTAL SHELF

DISTRIBUTION

ABST

ANNO

06/09/1987

.....
ACC 622
TYPE
YEAR 1968
AUTH EMERY, K.O.;
TITL RELICT SEDIMENTS ON CONTINENTAL SHELVES OF THE WORLD.

BIBL AM. ASSOC. PETROL. GEOL. BULL. 52(3):445-464.

KEYW PLEISTOCENE CONTINENTAL SHELF GEOLOGY
SEDIMENT DISTRIBUTIO

ABST

ANNO

06/09/1987

.....
ACC 2167

TYPE P

YEAR 1978

AUTH EMILIANI, C.; HUDSON, J.H.; SHINN, E.A.; GEORGE, R.Y.; LIDZ, B.;

TITL OXYGEN AND CARBON ISOTOPIC GROWTH RECORD IN A REEF CORAL FROM THE FLORIDA KEYS AND A DEEP-SEA CORAL FROM BLAKE PLATEAU.

BIBL SCIENCE 202:627-629.

KEYW GROWTH
METABOLISM

CORAL
CARBON

TEMPERATURE

ABST A 30 year (1944-1974) growth of *Montastraea annularis* from Hen and Chickens Reef, Florida Keys, exhibited annual variation in the abundance of carbon-13 and oxygen-18 with an inverse relationship between the two isotopes. Annual dense bands, characterized by carbon-13 and oxygen-16, are formed during summer. Stress bands are created during unusually severe winters and are characterized by carbon-13 and oxygen-18. The temperature effect on the oxygen-18/oxygen-16 ratio is overshadowed by an isotopic effect of zooxanthellae metabolism. In the deep sea ahermatypic coral, *Bathypsannia tintinnabulum*, the abundance of carbon-13 and oxygen-18 is inversely related to growth rate, with both carbon and oxygen isotopes approaching equilibrium with increasing skeletal age.

ANNO

06/09/1987

.....
ACC 2238

TYPE P

YEAR 1968

AUTH ENG, L.L.;

TITL A STUDY OF THE BIOLOGY OF THE PINK SHRIMP, PENAEUS DUORARUM BURKENROAD, IN
THE CEDAR KEY AREA WITH NOTES ON THE NON-COMMERCIAL SHRIMP.

BIBL MASTER'S THESIS. UNIVERSITY OF FLORIDA, GAINESVILLE, FL. 49 P.

KEYW BIOLOGY

PINK SHRIMP

ABUNDANCE

DISTRIBUTION

TEMPERATURE

RECRUITMENT

ABST Penaeus duorarum was studied in the Cedar Key area in order to determine abundance and distribution and the causal factors. Results showed that temperature and the abundance of juveniles were the important factors affecting the abundance of shrimp. Shrimp were less abundant during colder winter months, which may be due to their burrowing for protection from the cold. The recruitment period for P. duorarum is roughly June to November.

ANNO

06/09/1987

.....
ACC 2404

TYPE P

YEAR 1980

AUTH ENGSTROM, N.;

TITL REPRODUCTIVE CYCLES OF HOLOTHURIA (HALODEIMA) FLORIDANA, H.(H.) MEXICANA AND THEIR HYBRIDS (ECHINODERMATA: HOLOTHUROIDEA) IN SOUTHERN FLORIDA, USA.

BIBL INT. J. INVERT. REPROD. 2:237-244.

KEYW MONROE
SEASON

ECHINODERMATA

SPAWNING

ABST A reproductive study of the holothuroids, *Holothuria (Halodeima) floridana* and *H. (H.) mexicana* was conducted using monthly collections from the Atlantic side of Key Largo, Florida, from November 1968 to October 1969. Gametogenesis in the 2 species and their hybrids was found to occur during spring and summer with spawning occurring in late summer, followed by resorption of unspawned gametes. The simultaneity of the spawning seasons of the 2 species contributed to the occurrence of hybridization.

ANNO

06/09/1987

.....
ACC 2405
TYPE P
YEAR 1970
AUTH ENGSTROM, N. ;
TITL THE REPRODUCTIVE CYCLES, SYSTEMATIC STATUS, AND GENERAL BIOLOGY OF HOLOTHUR
IA (HALODEIMA) FLORIDANA POURTALES, 1851 AND H. (H.) MEXICANA LUDWIG, 1875.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL. 92 P.

KEYW MONROE	REPRODUCTION	BIOLOGY
LENGTH	WEIGHT	GROWTH
ECHINODERMATA		

ABST Various aspects of the reproduction system and general biology of Holothuri
a (Halodeima) floridana were studied in specimens obtained from the Key Lar
go area. Lengths and widths of animals and wet weights and dry weights wer
e measured. Gametogenesis studies showed highest activites in spring and s
ummer with spawning occurring in the fall. Growth rates are slow and sexua
l maturation takes at least 2 years. The possibility of hybridization occu
rring between H. (H.) floridana and H. (H.) mexicana is discussed.

ANNO

06/09/1987

.....

ACC 484
TYPE
YEAR 1974
AUTH ENVIRONMENT CONSULTANTS, INC.;
TITL SOCIOECONOMIC INVENTORY AND ANALYSIS OF THE GULF OF MEXICO REGION,
VOLUME 3.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C.

KEYW COASTAL ZONE COMMERCIAL FISHERY POLLUTION
 SOCIOECONOMIC TRANSPORTATION

ABST

ANNO

06/09/1987

.....

ACC 600

TYPE

YEAR 1974

AUTH ENVIRONMENT CONSULTANTS, INC.;

TITL ENVIRONMENTAL AND SOCIOENCONOMIC BASELINE ON THE GULF OF MEXICO COASTAL ZONE AND OUTER CONTINENTAL SHELF: SUPPLEMENTAL BIBLIOGRAPHY ON ENVIRONMENTAL PROCESSES AND CONDITIONS IN THE GULF OF MEXICO REGION. VOLUME 1.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C.

KEYW BIBLIOGRAPHY

BIOLOGY

COASTAL ZONE

GEOLOGY

HYDROLOGY

OCEANOGRAPHY

CONTINENTAL SHELF

PHYSICAL PROCESS

POLLUTION

SOCIOECONOMIC

ABST ;

ANNO

06/09/1987

.....
ACC 601

TYPE

YEAR 1974

AUTH ENVIRONMENT CONSULTANTS, INC.;

TITL ENVIRONMENTAL AND SOCIOECONOMIC BASELINE ON THE GULF OF MEXICO COASTAL ZONE
AND OUTER CONTINENTAL SHELF: SUPPLEMENTAL BIBLIOGRAPHY ON ENVIRONMENTAL PR
OCESSES AND CONDITIONS IN THE GULF OF MEXICO REGION. VOLUME 2.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C.

KEYW BIBLIOGRAPHY

BIOLOGY

COASTAL ZONE

GEOLOGY

HYDROLOGY

OCEANOGRAPHY

CONTINENTAL SHELF

PHYSICAL PROCESS

POLLUTION

SOCIOECONOMIC

ABST ;

ANNO

06/09/1987

.....
ACC 2322
TYPE P
YEAR 1979
AUTH ENVIRONMENTAL QUALITY LABORATORY, INC.
TITL HYDROBIOLOGICAL MONITORING JANUARY 1976 THROUGH OCTOBER 1978. LOWER PEACE
RIVER AND CHARLOTTE HARBOR.

BIBL VOL. II, AS PER SW FLS. WATER MANAGEMENT DIST. CONSUMPTIVE USE PERMIT. DEC.
10, 1975, FOR THE PEACE RIVER REG. WATER TREAT. PLANT. REPT. TO GEN. DEV.
KEYW CHARLOTTE BIOLOGICAL TEMPERATURE
SALINITY DO TIDES

ABST Volume II contains abiotic and biological data for Charlotte Harbor and the
lower Peace River from 1976 to 1978. A roster of species composition and
the number of individuals collected and a species list of terrestrial flora
observed along the lower Peace River are reported. The natural histories
of the following species are described: Luidia, pectinaria, Glottidia, Corb
icla, Polynesdoa, Grandidierella, Corophium, Cyathura, Edotea, Laeoneris, P
olydora and Amphicteis

ANNO

06/09/1987

.....
ACC 2322
TYPE P
YEAR 1979
AUTH ENVIRONMENTAL QUALITY LABORATORY, INC.
TITL HYDROBIOLOGICAL MONITORING JANUARY 1976 THROUGH OCTOBER 1978. LOWER PEACE
RIVER AND CHARLOTTE HARBOR.

BIBL VOL. II, AS PER SW FLS. WATER MANAGEMENT DIST. CONSUMPTIVE USE PERMIT. DEC.
10, 1975, FOR THE PEACE RIVER REG. WATER TREAT. PLANT. REPT. TO GEN. DEV.
KEYW CHARLOTTE BIOLOGICAL TEMPERATURE
SALINITY DO TIDES

ABST Volume II contains abiotic and biological data for Charlotte Harbor and the
lower Peace River from 1976 to 1978. A roster of species composition and
the number of individuals collected and a species list of terrestrial flora
observed along the lower Peace River are reported. The natural histories
of the following species are described: Luidia, pectinaria, Glottidia, Corb
icla, Polynesdoa, Grandidierella, Corophium, Cyathura, Edotea, Laeoneris, P
olydora and Amphicteis

ANNO

.....

ACC 2323
 TYPE P
 YEAR 1979
 AUTH ENVIRONMENTAL QUALITY LABORATORY, INC. ;
 TITL HYDROBIOLOGICAL MONITORING JANUARY 1976 THROUGH OCTOBER 1978. LOWER PEACE
 RIVER AND CHARLOTTE HARBOR.

BIBL VOL. II. AS PER SW FL WATER MGMT. DIST. CONSUMPTIVE ESE PERMIT. DEC 10,
 1975, FOR THE PEACE RIVER REG. WATER TREAT. PLANT RPT. GEN. DEV. UTIL. INC.

KEYW CHARLOTTE	PHYSICAL	BIOLOGICAL
PRIMARY PRODUCTION	NUTRIENT	WIND
SHRIMP	FISH	TEMPERATURE
SALINITY	DO	TIDE
CRAB		

ABST The influence of river flow on physical change and biological productivity were studied. Increased river flow during the wet season was found to result in vertical density stratification of the water column and also in lowered salinity levels in Charlotte Harbor. Vertical stratification was found to reduce mixing with a gradual depletion of dissolved oxygen occurring in the bottom waters. The primary production in the surface layers was determined to be stimulated enrichment with essential nutrients provided in part by photosynthesis in the surface layers. Primary producers were also determined to benefit from reduced predation by mobile predators that are forced by decreased DO and salinity levels to leave the upper harbor. In the fall, when decreased river flow and higher surface winds were noted to cause vertical mixing, mobile predators such as juvenile shrimp, crabs and fish move into the upper harbor to feed upon the abundant benthic food supply.

ANNO

.....

ACC 4158

TYPE P

YEAR 1985

AUTH ENVIRONMENTAL SCIENCE & ENG., INC. AND ECOLOGICAL RES. ASSOCIATES, INC. ;
 TITL SOUTHWEST FLORIDA SHELF BENTHIC COMMUNITIES STUDY YEAR 4 ANNUAL REPORT (CON
 TRACT #14-12-0001-30071).

BIBL SUBMITTED TO THE MINERALS MANAGEMENT SERVICE, NEW ORLEANS, LA. 3 VOL.

KEYW PHYSICAL	OCEANOGRAPHY	BIOLOGICAL
EPIFAUNA	INFAUNA	FISH
MACROALGAE	CURRENTS	WAVE
TIDE	HYDROGRAPHY	SEDIMENT
RECRUITMENT	FOULING	POPULATION DYNAMICS

ABST This report presents the findings of the fourth year of a 6-year study of the southwest Florida outer continental shelf benthic communities. The emphasis of the study was on the physical and biological processes that occur in soft, hard, and live bottom communities and an assessment of how these processes and communities might be affected by offshore oil and gas development. Infauna, epifauna, macroalgae, fish, sediments, salinity, temperature, dissolved oxygen, transmissivity, and pH, were sampled using a variety of methods including underwater television, benthic still photography, CTD hydrographic sampling, trawling, and dredging. In addition, continuous monitoring at 5 of the 15 stations of near-bottom temperature, ocean currents, waves, tides, sediment transport, epifaunal recruitment, and fish behavior was accomplished using instrumented arrays equipped with current meters, wave and tide gages, sediment traps, fouling plates, and time-lapse cameras. The biological data collected identified a diversity of taxa varying from a very dense epifaunal hard-bottom community in shallow water (e.g. over 100 species of sponges) to a sparse crinoid assemblage at the shelf break in 125 m of water. The shallow water communities are subject to greater natural stresses due to higher rates of sediment resuspension (up to 1,000 metric tons per square kilometer per day), higher frequency of wave induced water velocities, and considerable seasonal temperature variation. In spite of these stresses, these communities flourish and exhibit a recruitment rate that is higher than the stations located in water deeper than 50 M.

ANNO

06/09/1987

.....

ACC 4166

TYPE U

YEAR 1985

AUTH ENVIRONMENTAL SCIENCE & ENGINEERING, INC.;

TITL SOUTHWEST FLORIDA SHELF ECOSYSTEMS STUDY: SUMMARY OF 5-YEAR PROGRAM ACTIVITIES.

BIBL PREPARED FOR MINERALS MANAGEMENT SERVICE, NEW ORLEANS, LA.

KEYW SWFLA

EPIFAUNA

PHOTODOCUMENTATION

PHYSICAL

MACROALGAE

REMOTE SENSING

CHEMICAL

DEMERSAL FISH

ABST This report summarizes the objectives and the activities of the 6-year Southwest Florida Ecosystem Program. This report provides a reference documenting all sampling activities of the program but does not attempt to present results. Sampling activities up to the fifth year are itemized, and the planned field efforts for the remainder of the program are presented.

ANNO

06/09/1987

.....

ACC 782
TYPE
YEAR 1972
AUTH ERNST, L.H.; BARBOUR, R.W.;
TITL TURTLES OF THE UNITED STATES.

BIBL UNIVERSITY OF KENTUCKY PRESS, LEXINGTON, KY. 347 PP.

KEYW REPTILIA	ABUNDANCE	BIOLOGY
ECOLOGY	FEEDING HABIT	LIFE HISTORY
SPECIES COMPOSITION	TURTLE	

ABST

ANNO

06/09/1987

.....

ACC 2294
TYPE P
YEAR 1983
AUTH ESTEVEZ, E.D. ;
TITL AN ECOLOGICAL RECONNAISSANCE OF THE GRAND CANAL, SIESTA KEY, FLORIDA.

BIBL PREPARED FOR OFFICE OF COASTAL ZONE MANAGEMENT, SARASOTA, CO. BY MOTE MARINE LABORATORY, SARASOTA, FL. 19 P.

KEYW SARASOTA	HYDROGRAPHY	BIOLOGY
BATHYMETRY	BENTHIC	TEMPERATURE
SALINITY	D.O.	

ABST The hydrography and biology of the system of man-made canals on Siesta Key, Florida were analyzed. Studies included bathymetry, sedimentation and benthic fauna. Benthic species were indicative of oxygen depletion and organically rich sediments. Suggestions are made to increase tidal flow in the canals.

ANNO

06/09/1987

.....

ACC 2324

TYPE P

YEAR 1980

AUTH ESTEVEZ. E.D.;

TITL CHECKLISTS OF ESTUARINE AND MARINE BIOTA FROM CHARLOTTE HARBOR, FLORIDA AND
ADJACENT WATERS: FAUNA V, CRUSTACEANS.

BIBL MOTE MARINE LABORATORY, SARASOTA, FL. STAFF REPORT. DRAFT.

KEYW CHARLOTTE

CRUSTACEAN

ABST A checklist of species reported in published and unpublished studies in or near Charlotte Harbor, Florida is presented. One hundred eightyone verified species (reported from the Charlotte Harbor Estuarine complex) and 63 probable species (crustaceans found by studies in adjacent estuarine and Gulf waters) were identified. Corrections for synonymy were not made.

ANNO

06/09/1987

.....
ACC 2325
TYPE P
YEAR 1984
AUTH ESTEVEZ, E.D.;
TITL A REVIEW OF SCIENTIFIC INFORMATION, CHARLOTTE HARBOR ECOSYSTEM COMPLEX.

BIBL MOTE MARINE LABORATORY REVIEW SERIES NUMBER 3. REPORT TO SOUTHWEST
FLORIDA REGIONAL PLANNING COUNCIL. 2 VOL.

KEYW CHARLOTTE METEOROLOGY GEOLOGY
HYDROLOGY CHEMISTRY BIOLOGY

ABST The original scientific literature of the Charlotte Harbor region and its component estuarine areas was reviewed and organized into a primary reference document. About 1,200 unique references were examined. Areas included the region, Gasprilla Sound, Charlotte Harbor, Pine Island Sound and Matlach Pass, and San Carlos and Estero Bays. Topics for each area included land use, meteorology, geology, hydrology, water chemistry, and biology. Study needs were identified for future support.

ANNO

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ACC 1031
 TYPE
 YEAR 1983
 AUTH ETTER, P.C.;
 TITL HEAT AND FRESHWATER BUDGETS OF THE GULF OF MEXICO.

BIBL J. PHYS. OCEANGR. 13:2058-2069.

KEYW	EVAPORATION	HEAT BUDGET	HEAT STORAGE
	HYDROLOGY	LOOP CURRENT	MODEL
	PHYSICAL OCEANOGRAPH	PRECIPITATION	WATER BUDGET

ABST Monthly mean oceanic heat storage rates (QT) for the upper 200 meters of the Gulf of Mexico are calculated directly from multi-annual vertical temperature data. The annual march of QT exhibits a minimum of -170 W m^{-2} in January and a maximum of 170 W m^{-2} in May. Spatial distributions of QT are contoured on maps for February, May, August and November. These maps elucidate climatic features of air-sea interactions occurring over the Loop Current and also near the shelf edges of the northern Gulf. Three previous climatic heat budget studies encompassing the Gulf of Mexico are examined to determine the surface heat exchange: Budyko's and Bunker's-supplemented with more detailed but unpublished monthly results; and studies by Hastenrath and Lamb. While Budyko's values provide a familiar basis for comparisons, the more recent unpublished results of Bunker and Hastenrath and Lamb are averaged together to define the monthly mean radiative (QR) and turbulent (QA) heat exchanges in the Gulf of Mexico. Monthly mean advective heat changes (QV) are then derived as residuals in the heat budget equation ($QV = QR - QA - QT$). These QV values are partially verified by direct computations of the monthly mean vertical and horizontal components of heat advection according to the divergent heat budget equation developed by Emery. The residual QV values reinforce the observations of Elliott concerning the role of detached anticyclonic Loop Current rings in redistributing heat with the Gulf of Mexico.

ANNO

06/09/1987

.....
ACC 2295
TYPE P
YEAR 1978
AUTH EVANS, M.;BRUNGARDT, T.;EVANS, R.;
TITL SHORELINE ANALYSIS OF SARASOTA COUNTY BAY SYSTEMS WITH REGARD TO REVEGETATI
ON ACTIVITIES.

BIBL NEW COLLEGE OF THE UNIVERSITY SOUTH FLORIDA, ENVIRONMENTAL STUDY PROGRAM,
SARASOTA COUNTY, C.E.T.A. PROGRAM AND SARASOTA BD. CO. COMM. 71 P.
KEYW SARASOTA COASTAL ESTUARY
REMOTE SENSING PHOTODOCUMENTATIOAN AERIAL SURVEY

ABST An inventory and evaluaton of the estuarine resources of the study area was
prepared. Aerial photographs from 1948 to 1974 were used in resource mappi
ng. Methods for growing and transplanting shoreline vegetation were descri
bed. A shore line preference survey showed that respondants preferred natu
ral or vegetated shorelines.

ANNO

06/09/1987

.....

ACC 2296
TYPE P
YEAR 1977
AUTH EVANS, R.K.;
TITL TECHNIQUES AND SEASONAL GROWTH RATE OF TRANSPLANTED WHITE MANGROVES.

BIBL IN: PROCEEDINGS OF THE FOURTH ANNUAL CONFERENCE ON RESTORATION OF
COASTAL VEGETATION IN FLORIDA. P. 77-105.

KEYW SARASOTA FLORA GROWTH

ABST A transplantatoin study of the white mangrove (*Laguncuaira racemose*, was co
nducted on Siesta Key, Florida from February 1976 through March 1977. Grow
th rates were found to vary significantly with the months of transplantatio
n. Spring plantings resulted in the highest survival and growth rates of a
dult plants. Growth rates were greatly influenced by distance from shoreli
ne; plants near the shoreline that were not completely inundated experien
ced the highest growth rates. Root growth exceeded branch growth in all ex
periments.

ANNO

06/09/1987

.....
ACC 655

TYPE

YEAR 1981

AUTH EVERTS, C.H.;

TITL HUMAN INFLUENCE ON THE SEDIMENT BUDGET OF A BARRIER ISLAND.

IN: PROCEEDINGS OF THE CONFERENCE COASTAL ZONE 1980. P. 863-880.

BIBL AMERICAN SOCIETY OF CIVIL ENGINEERS, HOLLYWOOD, FL.

KEYW BARRIER ISLAND

COASTAL ZONE

EROSION

GEOLOGY

MANAGEMENT

PHYSICAL PROCESS

SEDIMENT TRANSPORT

SEDIMENTATION

ABST

ANNO

06/09/1987

.....
ACC 2353
TYPE P
YEAR 1973
AUTH EVINK, G.L.;
TITL THE ROLE OF MANGROVE ECOSYSTEMS: BIOMASS AND DIVERSITY OF BENTHIC MACROINVERTEBRATES OF FAKA UNION AND FAKAHATCHEE BAYS, FLORIDA.

BIBL U.S. DEPARTMENT OF INTERIOR, BUREAU OF SPORT FISHERY AND WILDLIFE, SOUTH FLORIDA ENVIRONMENTAL PROJECT ECOLOGICAL REPORT NO. D1-SFEP, P. 74.
KEYW COLLIER BIOMASS DIVERSITY
BENTHIC INVERTEBRATE

ABST A comparative study of the benthic macroinvertebrates of Faka Union and Fakahatchee Bays was conducted. The benthic macroinvertebrate biomass data revealed no significant differences between the bays. The analysis of the two bays showed that they have similar species with a small difference in species diversity.

ANNO

06/09/1987

.....

ACC 471

TYPE

YEAR 1974

AUTH EXXON PRODUCTION RESEARCH COMPANY;

TITL RESEARCH NEEDED TO DETERMINE CHRONIC EFFECTS OF OIL ON THE MARINE ENVIRONMENT.

IN: WORKSHOP PROCEEDINGS, NOVEMBER 4-6, 1974, HOUSTON, TX.

BIBL EXXON PRODUCTION RESEARCH COMPANY, HOUSTON, TX. 43 PP.

KEYW BIOLOGY
INDUSTRY
POLLUTION

DRILLING
OIL SPILL

EXPLORATION
OIL

ABST

ANNO

.....
ACC 615
TYPE
YEAR 1962
AUTH FAIRBANK, N.C.;
TITL HEAVY MINERALS FROM THE EASTERN GULF OF MEXICO.

BIBL DEEP-SEA RES. 9:307-338.

KEYW CONTINENTAL SHELF DISTRIBUTION GEOLOGY
HEAVY MINERAL SEDIMENT

ABST A study has been made of the minerals from surface samples of sediments of the Eastern Gulf of Mexico, from the Mississippi River delta to the coast of Florida, and south to 24 degrees 45'N, about the latitude of the Dry Tortugas. Methods of preparation and study are summarized, light and heavy minerals identified, and their distribution discussed. The area has been divided into four sedimentary provinces on the basis of the mineralogy of the coarse surface sediments: Mississippi River Province, Eastern Gulf Coastal Province, Florida Plateau Province, and Central Province. These provinces are named and described, and some speculation offered as to the significance of the minerals present.

ANNO

06/09/1987

.....
ACC 4197

TYPE P

YEAR 1986

AUTH FANG, C.S.; SMITH, S.A., JR.;

TITL CLEANING OF THE OCEAN FLOOR NEAR OFFSHORE PLATFORMS IN THE GULF COAST.

BIBL ENERGY PROG. 6(1):37-39.

KEYW OFFSHORE DRILLING

PETROLEUM

DEFAUNATION

ABST

ANNO

06/09/1987

.....
ACC 858
TYPE
YEAR 1973
AUTH FANNING, K.A.; PILSON, M.E.;
TITL THE LACK OF INORGANIC REMOVAL OF DISSOLVED SILICA DURING RIVER OCEAN MIXING

BIBL GEOCHEM. COSMOCHIM. ACTA 37:2405-2415.

KEYW AMMONIA	CARBON	NITRATE
NITRITE	ORTHOPHOSPHATE	SALINITY
SILICATE	UREA	WATER TEMPERATURE
NUTRIENT		

ABST Forty-nine stations were sampled between New Orleans and Galveston in an effort to describe some aspects of the Mississippi River plume. Samples were collected during December, 1969 on the cruise 152 of the R/V Gosnold. Water samples were filtered and analyzed for silica, organic carbon, orthophosphate, NO₃, NO₂, ammonia and urea.

ANNO

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ACC 2089
TYPE P
YEAR 1979
AUTH FANNING, K.A.; BETZER, P.R., ET AL.;
TITL CHARACTERISTICS OF A SUBMARINE GEOTHERMAL SPRING ON THE WEST FLORIDA
SHELF.

BIBL FLA. SCI. 42(SUPPL.):21.

KEYW BIOLOGICAL	GEOLOGICAL	CHEMICAL
PHYSICAL	TEMPERATURE	SALINITY
DISSOLVED OXYGEN	GEOTHERMAL	HOLE
NUTRIENT		

ABST Mud Hole Submarine Spring, a geothermal spring on the west Florida continental shelf was examined in terms of its biological, geological, chemical, and physical aspects. The flow rate of the spring is greater than 2.3×10^6 to the 6th l/day; the discharge rate is apparently influenced by tidal fluctuations. Water temperature at the discharge vent is approximately 36 degrees Celsius, although turbid surface water is often cooler than ambient water. Salinity of undiluted vent water averages 34.9 o/oo, less than surrounding waters. Dissolved oxygen content, pH, and alkalinity of the discharge water are very low. Nitrate, ammonia, and phosphate are present at very low concentrations. Densities of benthic epifauna and nekton appear increased in the spring area. Mud Hole and second spring, Steward Spring, serve as habitats for one or more large loggerhead turtles.

ANNO

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ACC 4231
 TYPE P
 YEAR 1982
 AUTH FANNING, K.A.;CARDER, K.L.;BETZER, P.R.;
 TITL SEDIMENT RESUSPENSION BY COASTAL WATERS A POTENTIAL MECHANISM FOR NUTRIENT
 RECYCLING ON THE OCEANS MARGINS.

BIBL DEEP-SEA RES. PART A OCEANOGR. RES. PAP. 29(8):953-966.

KEYW	SEDIMENT	NUTRIENT	STORM
	SUSPENDED	NITRATE	NITRITE
	AMMONIA	SILICATE	

ABST Nutrient profiles from the continental shelf of the northeastern Gulf of Mexico indicated considerable near-bottom enrichment in silica and nitrate above coarse sediments east of the Mississippi Delta. Near-bottom waters of the carbonate-rich West Florida Shelf showed no such enrichments. Storm-related suspension apparently produced the enrichments because, in near-bottom waters south of Mobile Bay, silica, nitrate plus nitrite and suspended load increased substantially as a winter storm front passed. Laboratory simulation of resuspension by stirring the supernatant seawater over a clay-rich core produced similar increases in silica and nitrate plus nitrite, with ammonia being the apparent precursor to the nitrate and nitrite. Most of the nutrient increase appeared to come from previously deposited sediments in the early stages of resuspension. Using the ratios of nutrients released to sediments resuspended, calculations indicate that resuspension of as little as 1 mm of shelf sediment could intermittently augment overlying productivity by as much as 100-200%. Resuspension may accelerate nutrient recycling on continental margins.

ANNO

06/09/1987

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ACC 4256

TYPE P

YEAR 1981

AUTH FANNING, K.A.; ET AL.;

TITL GEOTHERMAL SPRINGS OF THE WEST FLORIDA CONTINENTAL SHELF: EVIDENCE FOR DOLOMITIZATION AND RADIONUCLIDE ENRICHMENT.

BIBL EARTH PLANET. SCI. LETT. 52(2):345-354.

KEYW CARBONATE

SEDIMENT

GEOTHERMAL

ABST On the sea bed of the West Florida continental shelf about 45 km SSW of Ft. Myers, Florida, and 85-km SUP-2 area has been discovered in which six thermal springs discharge warm, chemically altered seawater from vents and seepage zones. The spring water apparently originates in the subsurface ocean around the Florida Platform and penetrates the highly porous strata of the platform about 500-1000 meters below sea level. It percolates toward the interior of the platform and is geothermally heated to about 40 C enroute. Then it rises along more vertical flow channels and is discharged in warm submarine springs. Beneath the platform, several chemical processes alter the percolating seawater. One process seems to be a secondary dolomitization of the limestone of the platform because, in the discharging seawater, magnesium is lower by 1.7 mmole/kg and calcium higher by 3.6 mmole/kg than in normal seawater with the same chlorinity. Other reactions within the sediments of the platform enrich the spring effluents 1000-fold in SUP-226 Ra, 10,000-fold in SUP-222 Rn, and 90-fold in SUP-228 Ra compared to the seawater surrounding the platform. Thus, the springs may be important sources of radionuclides for the Gulf of Mexico. The percolating seawater also loses all of its oxygen and nitrate to reduction processes, loses most of its phosphate and 40% of its SUP-238 U, and roughly quadruples its silica content. Coastal carbonate platforms are fairly common geological features.

ANNO

06/09/1987

.....
ACC 748
TYPE
YEAR 1979
AUTH FAUCHALD, K.;JUMARS, P.;
TITL THE DIET OF WORMS: A STUDY OF POLYCHAETE FEEDING GUILDS.

BIBL OCEANOGR. MAR. BIOL. ANN. REV. 17:193-284.

KEYW POLYCHAETE	BENTHIC COMMUNITY	BIOLOGY
COASTAL WATER	DETRITUS-	ECOLOGY
FEEDING HABIT	MACROFAUNA	MEIOFAUNA

ABST This review summarizes current information about the feeding biology of polychaetous annelids. The authors have organized the information into a limited number of patterns using the guild concept to define patterns. This paper consists of two sections. The first section summarizes current information about food and feeding habits within each polychaete family. The second is an analysis and interpretation of the data presented in the first section.

ANNO

06/09/1987

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ACC 4033

TYPE P

YEAR 1956

AUTH FEINSTEIN, A.;

TITL CORRELATIONS OF VARIOUS AMBIENT PHENOMENA WITH RED TIDE OUTBREAKS ON THE
FLORIDA WEST COAST.

BIBL BULL. MAR. SCI. 6(3):208-232.

KEYW RED TIDE

PRECIPITATION

METEOROLOGY

TROPICAL STORM

HYDROLOGY

ABST Investigations were made to determine whether any simple linear correlations exist between red tide outbreaks and various ambient phenomena. Outbreaks were compared with rainfall, tropical disturbances, and runoff. A pattern of cyclic recurrence of outbreaks is presented. An attempt is made to show the path of individual outbreaks. Correlations of red tide outbreaks with runoff and precipitation were too low to be significant however, an indirect relationship may exist. No linear correlations were found between tropical disturbances and red tide outbreaks.

ANNO

06/09/1987

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ACC 4034

TYPE P

YEAR 1983

AUTH FELDHAUSEN, P.H.;JOHNSON, D.

TITL ORDINATION OF TRACE METALS IN SYACIUM PAPILLOSUM (DUSKY FLOUNDER) FROM THE
EASTERN GULF OF MEXICO.

BIBL N.E. GULF SCI. 6(1):9-21.

KEYW BIOLOGY
FLATFISH
FISH

CHEMISTRY
DEMERSAL FISH
BENTHIC

MAFLA
TRACE METAL
BIOACCUMULATION

ABST Variations in the metals contents (Ba,Cd,Cr,Cu,Fe,Ni,Pb,V, and Zn) in the skeletal flesh of the demersal fish Syacium papillosum from 12 stations on the relatively unpolluted Mississippi, Alabama, and Florida continental margin are investigated with the aid of Q-moe ordination techniques. Gradient analysis on the station-season ordination shows that Ba, Cu, and Ni explain most of the normal variation. Of these metals only Cu and Ni increased from summer to winter; this increase may be related to decreased metabolism. The decrease of Ba (and Cd) in winter may be diet controlled. Based on ordination synthetic indices, nonparametric statistical tests indicate that the winter trace metal concentrations are multivariately distinct from those of the fall and summer sampling sites; the latter are not statistically distinguishable. The trace metal concentrations measured in the demersal fish specimens are weakly correlated (positive) with the metal concentrations measured in the weak acid digest of the study area bottom sediments.

ANNO

06/09/1987

.....
ACC 4035
TYPE U
YEAR 1982
AUTH FELDHAUSEN, P.H.;JOHNSON, D.;PALMER, H.D.;TREFRY, J.H.;
TITL WEAK ACID TRACE METAL FRACTION IN EASTERN GULF OF MEXICO BOTTOM SEDIMENTS.

BIBL PRESENTED AT THE 11TH INTERNATIONAL SEDIMENTOLOGICAL CONGRESS (PREPRINT).

KEYW TRACE METAL	SEDIMENT	DEMERSAL FISH
FLATFISH	MAFLA	FISH
CARBONATE	GRAIN SIZE	GEOCHEMISTRY
CONTINENTAL SHELF		

ABST Variations in the weak acid (partial digest) metal concentrations in bottom sediments from 49 stations on the Mississippi, Alabama, and Florida continental margin are investigated with the aid of ordination and other multivariate statistical techniques. Total iron, carbonate content, clay fraction and water depth correlate well with the overall sediment metal values of pooled station replicated over 4 sampling periods. Individual metal concentrations are also correlated with these and other environmental parameters using stepwise multiple linear regression techniques. A positive association between the trace metal burdens in the demersal fish *Syacium papillosum* and the weak acid sediment trace metal concentrations is demonstrated.

ANNO

06/09/1987

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ACC 2014
TYPE P
YEAR 1981
AUTH FINDLAY, R.H. ;
TITL THE EFFECTS OF THE SAND DOLLAR MELLITA QUINQUIESPERFORATA ON THE BENTHIC
MICROBIAL COMMUNITY.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL. 42 P.

KEYW BENTHIC	COMMUNITY	ECHINODERMATA
LIPID	MEIOFAUNA	BACTERIA

ABST Analysis of sediment in which sanddollars (*Mellita quinquiesperforata*) had fed revealed increases in the oxidized sediment zone and decreases in amounts of several lipid components. This data and direct counts of the meiofauna indicate selective feeding by *Mellita* on microeucaryotes and bacteria attached to silt and clay.

ANNO

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ACC 4036
 TYPE P
 YEAR 1984
 AUTH FINUCANE, J.H.; COLLINS, L.A.;
 TITL REPRODUCTIVE BIOLOGY OF CERO, SCOMBEROMORUS REGALIS, FROM COASTAL WATERS OF
 SOUTH FLORIDA.

BIBL N.E. GULF SCI. 7(1):101-107.

KEYW	BIOLOGY	FISH	LIFE HISTORY
	REPRODUCTION	FEDUNDITY	SPAWNING AREA
	BREEDING CYCLE	COASTAL	WEIGHT

ABST Cero, scomberomorus regalis, were collected off south Florida during 1980-81 to determine their reproductive biology. Spawning of cero occurs in coastal water throughout most of the year with a peak in May. Males attain maturity at about 350 mm FL and females at about 380 mm FL. Fecundity estimates from 20 late maturing or ripe females ranged from 161,000 ova for a 380 mm fish weighing 558 g to 2,234,000 ova for a 800 mm fish weighing 4,944 g. Total weight better indicated fecundity than did fork length. The relationship between fecundity and total weight was expressed by least square equation $F = -1.079 \times 10^{-1} + (4.342 \times 10^{-4}) TW$. The mean number of ova per gram of fish weight was 362.

ANNO

06/09/1987

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ACC 687

TYPE

YEAR 1980

AUTH FLANDORFER, M.; SKUPLIN, L., EDS.;

TITL PROCEEDINGS OF A WORKSHOP FOR POTENTIAL FISHERY RESOURCES OF THE NORTHERN G
ULF OF MEXICO.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-80-012.

KEYW BIOLOGY

FISHERY

ABST

ANNO

06/09/1987

.....
ACC 2406
TYPE P
YEAR 1962
AUTH FLEECE, J.B.;
TITL THE CARBONATE GEOCHEMISTRY AND SEDIMENTOLOGY OF THE KEYS OF FLORIDA BAY, FLORIDA.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW MONROE	CARBONATE	GEOCHEMISTRY
SEDIMENT	MINERALOGY	GRAIN SIZE

ABST Sediment cores from 5 keys and their associated shoals in Florida Bay, Florida were analyzed for texture and mineralogy. The depositional history of each site is described and comparisons are drawn between the sediment characteristics of the keys and their shoals.

ANNO

06/09/1987

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ACC 707

TYPE

YEAR 1984

AUTH FLINT, R.W.; KAMYKOWSKI, D.;

TITL BENTHIC NUTRIENT REGENERATION IN SOUTH TEXAS COASTAL WATERS.

BIBL ESTUARINE, COASTAL SHELF SCI. L8:221-230.

KEYW BENTHIC FAUNA
NUTRIENT

BIOLOGY
SEDIMENT

CURRENTS

ABST

ANNO

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ACC 4206
 TYPE P
 YEAR 1980
 AUTH FLINT, R.W.; HOLLAND, J.S.;
 TITL BENTHIC INFAUNAL VARIABILITY ON A TRANSECT IN THE GULF OF MEXICO.

BIBL ESTUARINE & COAST. MAR. SCI. 10(1):1-14.

KEYW ASSEMBLAGE	SEDIMENT	POLYCHAETE
MOLLUSC	CRUSTACEAN	COMMUNITY
TEMPERATURE	SALINITY	DEPTH
BIOLOGY	DISTRIBUTION	INFAUNA

ABST Macroinfaunal benthos off the South Texas coast of the Gulf of Mexico formed different assemblages distributed according to depth: shallow (22 m), mid-depth (36 to 49 m), and deep water (78 to 131 m). Species composition of shallower stations were less diverse composed of eurytopic and opportunistic species adapted to a fluctuating environment. The deep water benthos, in a more stable environment, had a higher diversity. Sediment composition (high proportions of silt) at the mid-depth stations resulted in dominance of deposit feeders. The environmental gradient was related to a species continuum which changed from polychaete dominated groups in shallow water to deposit feeding molluscs and crustaceans, to a deep water diverse fauna not dominated by any particular group. Environmental heterogeneity, including climatic variability, may be most important in controlling shallow water benthos. In deeper more stable shelf habitats where diversities are higher and species equilibrium is the case, species interactions may determine community structure.

ANNO

06/09/1987

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ACC 4233
TYPE P
YEAR 1982
AUTH FLINT, R.W.;RABALAIS, N.N.;
TITL GULF OF MEXICO SHRIMP PRODUCTION: A FOOD WEB HYPOTHESIS.

BIBL U.S. NATIONAL MARINE FISHERY SERVICE FISH BULL. 79(4):737-748.

KEYW SHRIMP	MODEL	ZOOPLANKTON
INFAUNA	SEDIMENT	FISHERY
PHYSIOLOGY	PRODUCTIVITY	FOOD CHAIN

ABST The dynamics of commercial shrimp populations which support an important regional fishery on the south Texas (USA) outer continental shelf led to an investigation of an extensive data base for links in the various ecosystem components that related to these dynamics. A correlational model was developed that suggested relationships between pelagic and benthic components of the south Texas marine ecosystem. Utilizing tracers, such as Ni concentrations in biota, sediment and water, pathways of natural transfer between zooplankton, the benthos and coastal shrimp populations were identified. A theoretical food web for the shrimp populations was developed, focusing on transfer of C. The majority of primary production (approximately 80%) is diverted to the benthos. Secondary production of benthic infauna was not sufficient to alone support the coastal shrimp populations. At least part of their nutrition was derived from the detritus pool which was maintained by the excessive amount of primary production diverted to the benthos. The marine ecosystem in the coastal waters of south Texas apparently functions differently than other ecosystems studied in recent years. There is a need for a better understanding of the basis upon which marine living resources are supported in order to predict not only fishery yields but also effects of environmental disturbance.

ANNO

06/09/1987

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ACC 399
TYPE
YEAR 1981
AUTH FLORIDA SEA GRANT COLLEGE;
TITL ENVIRONMENTAL IMPACT STATEMENT AND FISHERY MANAGEMENT PLAN FOR THE REEF FIS
H RESOURCES OF THE GULF OF MEXICO.

BIBL GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, TAMPA, FL. 140 PP.

KEYW	BIOLOGY	MANAGEMENT	FISHERY
	FISHERY STATISTICS	FISHING GEAR	REEF
	SOCIOECONOMIC		

ABST

ANNO

06/09/1987

.....
ACC 2090
TYPE P
YEAR 1979
AUTH FLORIDA DEPARTMENT OF NATURAL RESOURCES;
TITL PROJECT HOURGLASS--A SYSTEMATIC ECOLOGICAL STUDY OF WEST FLORIDA SHELF BIOTIC COMMUNITIES.

BIBL MAR. RESEARCH LAB. PUBL. 9 P.

KEYW HOURGLASS COMMUNITY TEMPERATURE
SALINITY

ABST This paper describes the systematic sampling program of Project Hourglass and lists the reports published from the collected data. During Project Hourglass, 5 stations in depths of 6, 18, 37, 55, and 73 m along two east-west transects on the west Florida shelf were sampled from August 1965 to November 1967. The transects were located off Sanibel Island and Tampa Bay approximately 160 km apart. Benthic and planktonic fauna and flora were collected, and environmental parameters were measured at each station. Thus far, 76 publications have resulted from Project Hourglass data, with an additional 75-80 reports expected.

ANNO

06/09/1987

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ACC 2045

TYPE P

YEAR 1971

AUTH FONTAINE, C.T.; NEAL, R.A.;

TITL LENGTH-WEIGHT RELATIONS FOR THREE COMMERCIALY IMPORTANT PENAEID SHRIMP OF
THE GULF OF MEXICO.

BIBL TRANS. AM. FISH. SOC. 100:584-586.

KEYW LENGTH

WEIGHT

PINK SHRIMP

BROWN SHRIMP

ABST Sexual variations in the size ranges of 2 penaeid shrimp species were determined for shrimp collected from the upper Texas coast and Florida Tortugas grounds. Length-weight relationships were determined for *Penaeus aztecus*, *P. setiferus*, and *P. duorarum* on a seasonal basis. Differences in size between sexes and species are given.

ANNO

06/09/1987

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ACC 4037

TYPE P

YEAR 1985

AUTH FOOTE, R.Q.;

TITL SUMMARY REPORT ON THE REGIONAL GEOLOGY, PETROLEUM GEOLOGY, ENVIRONMENTAL GEOLOGY, AND ESTIMATES OF UNDISCOVERED RECOVERABLE OIL AND GAS RESOURCES IN THE PLANNING AREA OF PROPOSED OUTER CONTINENTAL SHELF OIL AND GAS LEASE NO. 94, EASTERN GULF OF MEXICO.

BIBL U.S. GEOLOGICAL SURVEY OPEN FILE REPT. 85-669. 113 P.

KEYW GEOLOGY
SEISMIC

GEOPHYSICAL
HYDROCARBON

OIL EXPLORATION
RESOURCE

ABST The U.S. Geological Survey prepared a summary of geological framework, petroleum geology, and the potential geologic problems and hazards associated with development of petroleum resources in the 59 million acre eastern Gulf of Mexico planning area. Seismic data from eastern Gulf of Mexico included 17,023 nautical miles of reflection profiles. This information was supplemented with data from 27 exploratory wells drilled within the planning area. Total estimated undiscovered recoverable resources in the planning area range from 0.22 to 3.98 billion barrels of oil and from 0.21 to 3.23 trillion cubic feet of gas. The mean estimate for oil is 1.53 billion barrels and the mean for gas is 1.58 trillion cubic feet. The planning area covers 92,515 square miles; water depths range from less than 33 feet to more than 10,810 feet. The hydrocarbon-producing region in the northwestern Gulf is primarily a Cenozoic terrigenous basin in which the cumulative thickness of the sediments is greater than 6 mi. The main hydrocarbon-bearing intervals offshore are Miocene, Pliocene, and Pleistocene age. The general areas of Miocene, Pliocene, and Pleistocene production in the central and western Gulf of Mexico are also reviewed in the report.

ANNO

06/09/1987

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ACC 487
TYPE
YEAR 1977
AUTH FORE, P.L., ED.;
TITL PROCEEDINGS OF THE 1977 OIL SPILL RESPONSE WORKSHOPS.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS-OBS-77124. 153 PP.

KEYW AVES	BIOLOGY	CHEMISTRY
COASTAL WATER	EXPLORATION	INDUSTRY
OIL SPILL	OIL	POLLUTION

ABST

ANNO

06/09/1987

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ACC 4220

TYPE P

YEAR 1977

AUTH FORRISTALL, G.Z.; HAMILTON, R.C.; CARDONE, V.J.;

TITL CONTINENTAL SHELF CURRENTS IN TROPICAL STORM DELIA: OBSERVATIONS AND THEORY

BIBL J. PHYS. OCEANOGR. 7(4):532-546.

KEYW STORM
WAVE

CURRENTS
WIND

MODEL
SEDIMENT TRANSPORT

ABST Storm currents are a significant part of the design hydrodynamic flow field in areas subject to tropical storms. In September 1973, Tropical Storm Delia passed over the instrumented Buccaneer platform located in 20 m of water 50 km south of Galveston, Texas. Current meter records from three depths showed that the storm produced currents on the order of 2 m/s which persisted to near the bottom. A mathematical model of wind-driven current generation was successful in hindcasting the observed current development after a linear slip condition bottom was incorporated in the model.

ANNO

06/09/1987

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ACC 4257
TYPE P
YEAR 1980
AUTH FORRISTALL, G.Z.;
TITL A TWO-LAYER MODEL FOR HURRICANE-DRIVEN CURRENTS ON AN IRREGULAR GRID.

BIBL J. PHYS. OCEANOGR. 10(9):1417-1438.

KEYW MODEL	CURRENTS	WIND
STORM	WIND STRESS	HURRICANE
RIVER DISCHARGE		

ABST Measurements made during Hurricanes Carmen and Eloise revealed some features of wind-driven currents which have been incorporated into a numerical model. In the summer, near-surface waters on the continental shelf off Louisiana are usually strongly stratified by river runoff. The passage of a hurricane provides enough energy to mix the surface layer down to a depth between 30 and 45 m. At the same time, a two-layer current system develops, with the mixed layer responding much more directly to the wind shear than the bottom layer. This system was modeled by parameterizing the mixed layer with a much lower eddy viscosity. A modification of a previously developed convolution integral scheme permits calculation of the detailed structure in both layers without requiring a three-dimensional grid. To eliminate some problems with lateral boundary conditions, the vertically integrated calculations were performed on an irregular grid system covering the entire Gulf of Mexico. Comparisons with the storm measurements show that the model is reasonably accurate, but there are still some unmodeled processes.

ANNO

06/09/1987

.....
ACC 2407

TYPE P

YEAR 1973

AUTH FOSSHAGEN, A.;

TITL A NEW GENUS OF SPECIES OF BOTTOM LIVING CALANOID (COPEPODA) FROM FLORIDA AND COLOMBIA.

BIBL SARSIA 52:145-154.

KEYW MONROE

CRUSTACEA

ABST The description of a new species, *Epacteriscus rapax*, was presented. This species was considered to belong to a family of its own which shows some similarities with the Arietellidae and Ridgewayiidae. The mouth parts were reduced and specialized. The mandibular blade was unique among calanoids in having a strong coarsely serrated process which is directed ventrally and is probably used for catching or holding prey. The legs were generally unspecialized with no reduction in segmentation except for the fifth legs of the male.

ANNO

06/09/1987

.....
ACC 2091
TYPE P
YEAR 1974
AUTH FOSTER, R.;
TITL THE MACROBENTHOS OF SELECTED HABITATS FROM THE WEST COAST OF FLORIDA: A MUL
TIVARIATE ANALYSIS.

BIBL ENVIR. STUD. PROG. NEW COLLEGE OF THE UNIVERSITY OF SOUTH FLORIDA. 57 P.

KEYW HABITAT	BENTHIC	SALINITY
DO	NUTRIENT	MODEL

ABST The study applied principal components analysis to a largely unfathomable ecological data base to yield a simple model of a many-sided situation. The statistical properties and biological implications of the multivariate analysis (known as principal component analysis) were described in detail. Data on the macrobenthos of 4 separate areas were collected. This analysis was limited to those species which occurred in at least 4 samples in any one area. Complete lists of data used were included. Through the analysis, gradients distributions and the relative health of these estuarine communities were discussed.

ANNO

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ACC 4210
 TYPE P
 YEAR 1979
 AUTH FOTHERINGHAM, N.;WEISSBERG, G.H.;
 TITL SOME CAUSES, CONSEQUENCES AND POTENTIAL ENVIRONMENTAL IMPACTS OF OXYGEN DEPLETION IN THE NORTHERN GULF OF MEXICO.

BIBL PROC. 11TH ANNU. OFFSHORE TECH. CONF. 4:2205-2208.

KEYW BIOLOGICAL	WATER COLUMN	SALINITY
LOOP CURRENT	DISSOLVED OXYGEN	POLYCHAETE
MOLLUSC	CRUSTACEAN	BLUE CRAB
SHRIMP	FISH	HYPOXIA

ABST Biological and water quality changes in the Gulf of Mexico off central Louisiana coast have been examined during a seasonal period of stratification and oxygen depletion in the water column. Probable causes, observed effects, and potential impacts on the timing of ocean discharges and dumping and onsite selection for offshore industries are described. Apparently an annual phenomenon of variable intensity resulting from a large discharge of low salinity organic-laden water from the Mississippi and Atchafalaya Rivers at a time of minimal vertical mixing, this midsummer event may be intensified and prolonged by the intrusion of high salinity bottom waters from a Loop Current eddy. In 1978, a widespread low oxygen layer occupied the lower 3 to 8 m of the 6 to 17 m water column for at least 3 weeks. Dissolved oxygen concentration was commonly less than 0.1 ppm in this layer, resulting in the mortality of some polychaetes, mollusks, and crustaceans, including blue crabs, and in the reduction of demersal shrimp and fish populations, probably through emigration offshore. Numerous large bivalves approximately 4 to 5 years old were killed, indicating an intensity not experienced since 1973 to 1974, when Green found anoxic bottom water at over one-half of his stations in this area. The temporal and geographic distribution of this condition and its environmental consequences should be recognized by industries engaged in fishing, offshore petroleum production, and offshore dumping and by government agencies providing leases and permits for these activities.

ANNO

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ACC 357

TYPE

YEAR 1972

AUTH FRANKS, J.S.;CHRISTMAS, J.Y.;SILER, W.L.;COMBS, R.;WALLER, R.;BURNS, C. ;
 TITL A STUDY OF NEKTONIC AND BENTHIC FAUNAS OF THE SHALLOW GULF OF MEXICO OFF TH
 E STATE OF MISSISSIPPI.

BIBL GULF RES. REP. 4(1).

KEYW	BENTHIC COMMUNITY	BIOLOGY	FISHERY
	NEKTON	PHYSICAL PROCESS	NUTRIENT
	TEMPERATURE	SALINITY	ICHTHYOPLANKTON

ABST A seasonal study of the nektonic and benthic faunas of the shallow Gulf of Mexico off Mississippi was conducted from January 1967 through May 1969. It was planned to sample monthly six fixed offshore stations at depths ranging from 5 to 50 fathoms in the open Gulf. In general this was carried out fairly well, as shown by Table 1. Water samples were taken from surface, midwater, and bottom levels each time a station was occupied, and temperatures and salinities were recorded for each of these. Samples were tested for the presence of nitrates, nitrites, ortho-phosphates and total phosphates. Secchi disc extinction points were recorded. Grab samples were taken for the determination of bottom composition. Plankton samples were taken from surface, midwater and bottom levels. Copepods, brachyuran zoea and megalops, stomatopod larvae, *Lucifer faxoni*, *Acetes a. carolinae*, *Penilia avirostris*, *Doliolum* sp. and fish eggs and larvae were present in greatest abundance. Surface and benthic nekton samples were obtained. Dredge samples were made quarterly and twelve invertebrate species and three species of fishes were collected. *Renilla mulleri* was the most abundant species taken, and the fish catch consisted of *Centropristes ocyurus*, *Citharichthys spilopterus* and *Etropus crossotus*. Accounts of 50 invertebrate species (24,679 specimens) and 129 fishes (93,563 specimens) taken in trawl hauls is presented. Temperature and salinity data are given for all species. Relative abundance, seasonal bathymetric distributions and movements, apparent growth patterns, catch per unit of effort and various biological data are noted for the most abundant

ANNO 92.9% to the total fish catch.

06/09/1987

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ACC 1075

TYPE

YEAR 1972

AUTH FRANK, D.J.;

TITL DEUTERIUM VARIATIONS IN THE GULF OF MEXICO AND SELECTED ORGANIC MATERIALS.

BIBL PH.D. DISSERTATION. TEXAS A&M UNIVERSITY. COLLEGE STATION, TX. 118 PP.

KEYW SALINITY

WATER TEMPERATURE

ZOOPLANKTON

ABST Samples of zooplankton were collected from the Gulf of Mexico during cruises 70-A-14, 71-A-3, 71-A-5, 71-A-12 and 71-A-9 of the R/V Alaminos. 160 water samples were also collected from the Gulf of Mexico, Caribbean Sea, and Mississippi and Coatzacoalcos Rivers. Plankton and water samples were analyzed for deuterium and protium and physical data including temperature and salinity were collected.

ANNO

06/09/1987

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ACC 1076
TYPE
YEAR 1972
AUTH FRANK, D.J.;
TITL

BIBL

KEYW

ABST

ANNO

06/09/1987

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ACC 4038

TYPE P

YEAR 1983

AUTH FRENCH, C.O.; PARSONS, J.W.;

TITL FLORIDA COASTAL ECOLOGICAL CHARACTERIZATION: A SOCIOECONOMIC STUDY OF THE S
OUTHWESTERN REGION.

BIBL U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES, WASHINGTON
, D.C. FWS/OBS-83/14. 2 VOL.

KEYW SOCIOECONOMIC RECREATIONAL FISHERY COMMERCIAL FISHERY
COASTAL

ABST Data are compiled from existing sources on social and economic character
istics of the southwestern coastal region of Florida, which is made up of C
harlotte, Collier, DeSoto, Hillsborough, Lee, Manatee, Monroe, Pasco, Pinell
as, and Sarasota Counties. Described are the components and interrelations
hips among complex processes that include population and demographics chara
cteristics, minerals production, multiple-use conflicts, recreation and to
urism, agricultural production, sport and commercial fishing transportation
, industrial and residential development, and environmental issues and regu
lations. Energetics models of socioeconomic systems are also presented. T
he report consists of one volume of text and three volumes that contain the
data appendix.

ANNO

06/09/1987

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ACC 425

TYPE

YEAR 1982

AUTH FRITTS, T.H.; IRVINE, A.B.; JENNINGS, R.D.; COLLUM, L.A.; HOFFMAN, W.; MCGEHEE,
TITL TURTLES, BIRDS AND MAMMALS IN THE NORTHERN GULF OF MEXICO AND NEARBY ATLANT
IC WATERS. AN OVERVIEW BASED ON AERIAL SURVEYS OF OCS AREAS, WITH EMPHASIS
ON OIL AND GAS EFFECTS.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS-OBS-82-65. 455 PP.

KEYW	AVES	MAMMALIA	REPTILIA
	VERTEBRATA	AERIAL SURVEY	BIOLOGY
	ECOLOGY	SPECIES COMPOSITI	TURTLES

ABST Aerial line transect surveys of marine turtles, birds, and mammals were con
ducted in four areas of the Gulf of Mexico and nearby Atlantic waters. Area
s surveyed were 111 km by 222 km and located off Brownsville Texas; Marsh I
sland, Louisiana; Naples, Florida; and Merritt Island, Florida. Data on dis
tribution, abundance, seasonal occurrence, and habitat use are reported in
accounts for each of the 88 species observed. Information on reproduction,
behavior, and potential impacts of Outer Continental Shelf (OCS) developmen
t are also discussed. Later chapters summarize the fauna of each of the fou
r areas; characterize the inshore, nearshore, and offshore fauna; and discu
ss the effects of OCS development on marine vertebrates.

ANNO

06/09/1987

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ACC 4039
TYPE P
YEAR 1981
AUTH FRITTS, T.H.;REYNOLDS, R.P.;
TITL PILOT STUDY OF THE MARINE MAMMALS, BIRDS, AND TURTLES IN OCS AREAS OF THE G
ULF OF MEXICO.

BIBL PREPARED FOR THE U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT
AND FISH AND WILDLIFE SERVICE, WASHINGTON, D.C. CONTRACT NO. 14-16-009-79-

KEYW BIRD	MAMMAL	TURTLE
HABITAT	ENDANGERED SPECIES	BIOLOGY
AERIAL SURVEY	SEABIRD	AVES
REPTILIA	MAMMALIA	

ABST Aerial surveys of marine mammals, birds and turtles were conducted at four subunits of the Gulf of Mexico from August to December 1979. This Pilot Study was designed to develop techniques and to collect primary data on the vertebrate faunas of outer continental shelf (OCS) waters. This information, once expanded to include an adequate sample size will be important to evaluating effects of oil and gas development in offshore areas. Surveys were conducted at altitudes of 91 and 228 m. The 91-m surveys were superior for detecting and identifying birds and turtles, while more area could be surveyed for larger animals at 228 m. Waters within 111 km of shore were sampled at a ratio in relation to waters 111 to 222 km offshore. Texas subunits extended beyond the continental shelf, but Florida subunits did not. Observations were made on 12 mammal, 35 bird, and 5 turtle taxa. Sperm whales were documented in water off Texas. Marine turtles were common in the eastern Gulf but virtually absent from the western areas studied. Differences in dolphin faunas in the eastern and western subunits were noted and potential north-south movements in response to season were noted on both sides of the Gulf of Mexico. The maps and basic ecological data collected provided a unique view of faunal differences within OCS areas of the Gulf of Mexico. Because of the complexity of the Gulf of Mexico and its fauna, additional analyses will depend upon having data encompassing annual, seasonal, geographic, and bathymetric variation. Additional survey areas and more frequent samples emphasizing seasonal variation on successive years are required

ANNO

06/09/1987

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ACC 4230

TYPE P

YEAR 1984

AUTH FRITTS, T.H.;HOFFMAN, W.;MCGEHEE, M.A.;

TITL THE DISTRIBUTION AND ABUNDANCE OF MARINE TURTLES IN THE GULF OF MEXICO AND
NEARBY ATLANTIC WATERS.

BIBL J. HERPETOL. 17(4):327-344.

KEYW DISTRIBUTION
DEPTH

ABUNDANCE
HERPETOFAUNA

TURTLE
REPTILIA

ABST Aerial surveys of marine waters up to 222 km from shore in the Gulf of Mexico and nearby Atlantic Ocean suggest that marine turtles are largely distributed in waters less than 100 m in depth. The loggerhead turtle (*Caretta caretta*) was observed nearly 50 times as often in waters off eastern and western Florida (USA) as in the western Gulf of Mexico. Loggerheads were present year-round but the frequency of sightings in the winter months was lower than at other seasons. Green turtles (*Chelonia mydas*) were infrequently observed but were most conspicuous in water off eastern Florida. Kemp's ridleys (*Lepidochelys kempi*) were most frequently sighted off southwestern Florida and rarely observed in the western Gulf of Mexico. Leatherback turtles (*Dermochelys coriacea*) were more conspicuous on the continental shelf than in adjacent deeper water. A concentration of leatherback and loggerhead turtles occurred west of the Gulf Stream Current in August 1980, near Brevard County, Florida.

ANNO

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ACC 4040
TYPE P
YEAR 1983
AUTH FRY, B.;
TITL FISH AND SHRIMP MIGRATIONS IN THE NORTHERN GULF OF MEXICO ANALYZED USING
STABLE C, N, AND S ISOTOPE RATIOS.

BIBL FISH. BULL. 81(4):789-801.

KEYW BIOLOGY	DEMERSAL FISH	FISH
INVERTEBRATE	BENTIC	ISOTOPE RATIO
MIGRATION	RECRUITMENT	PINK SHRIMP
SEAGRASS	LIFE HISTORY	BROWN SHRIMP

ABST Natural stable isotope tags were used in northern Gulf of Mexico to interpret migrations of five commercial fish and shrimp species: *Leiostomus xanthurus*, *Micropogonias undulatus*, *Penaeus aztecus*, *P. duorarum*, and *P. setiferus*. Along the south of Texas and Florida coasts isotopic analyses showed seagrass meadows and possibly other shallow estuarine habitats are important feeding grounds for shrimp that are later caught in offshore fisheries. Thus stable carbon, nitrogen, and sulfur values of juvenile shrimp in grass flats coincided with isotopic values of small shrimp collected offshore. Because isotopic values were similar in *Spartina* marshes and open bays along this northern coast, no conclusions could be reached about the relative importance of *Spartina* marshes as inshore feeding grounds. During feeding and growth offshore eventual convergence about offshore isotopic values should result for the migratory species studied. However striking differences in convergence patterns were evident for the five species, ranging from close convergence at small, subadult sizes (*P. aztecus* and *P. duorarum*) to nonconvergence among adults (*L. xanthurus*). These differences point to contrasts in the basic life history patterns of migration (especially the juvenile vs. adult size at which offshore migration occurs), and, for one species, showed that isotopic methods can trace yearly variations in these patterns.

ANNO

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ACC 786
 TYPE
 YEAR 1979
 AUTH FUCIK, K.W.;EL-SAYED, S.Z.;
 TITL EFFECT OF OIL PRODUCTION AND DRILLING OPERATIONS ON THE ECOLOGY OF PHYTOPLANKTON IN THE OEI STUDY AREA.
 IN. C.H. WARD, M.E. BENDER, AND D.J. REISH, EDS. THE OFFSHORE ECOLOGY INVESTIGATION, EFFECTS OF OIL DRILLING AND PRODUCTION IN A COASTAL ENVIRONMENT. P. 325-353.
 BIBL RICE UNIVERSITY STUDIES, VOL. 65, NOS. 4 & 5. WILLIAM MARSH RICE UNIVERSITY, HOUSTON, TX.
 KEYW BIOLOGY BIOMASS ECOLOGY
 PHYTOPLANKTON PRIMARY PRODUCTIVITY STANDING CROP
 OFFSHORE DRILING

ABST Between June 1972 and January 1974, twelve cruises were made to study photosynthetic rates and the standing crop of phytoplankton off the Louisiana coast. Data from a production platform were compared with data from a control station 6 miles northeast of the platform, with regard to photosynthetic activity of phytoplankton; chlorophyll a as a measure of the standing crop; species composition; and nutrient salts. Seasonal variations in all categories were observed at the platform and control station. Chlorophyll a values were lowest in November 1972 and January 1973. Highest standing crop values were recorded in April 1973, during the bloom of *Skeletonema costatum*. The OEI study area is considered one of the most productive areas of phytoplankton in the Gulf. Our investigation showed no deleterious effects from the oil production platform.

ANNO

06/09/1987

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ACC 4184
TYPE P
YEAR 1981
AUTH FUCIK, K.W.;SHOW, I. T.;
TITL ENVIRONMENTAL SYNTHESIS USING AN ECOSYSTEMS MODEL.

BIBL MR. SCI. (PLENUM) ENVIRON. EFF. OFFSHORE OIL PRODUCTION. BUCCANEER GAS OIL
FIELD STUDY 14:329-353.
KEYW HYDROCARBON POLLUTION OFFSHORE DRILLING
MODEL

ABST

ANNO

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ACC 727

TYPE

YEAR 1978

AUTH FULLER, D.A.;

TITL THE HABITS, DISTRIBUTION, AND INCIDENTAL CAPTURE OF SEA TURTLES IN THE GULF OF MEXICO.

IN APPENDIX A, DRAFT ENVIRONMENTAL IMPACT STATEMENT AND FISHERY MANAGEMENT PLAN FOR THE SHRIMP FISHERY OF THE GULF OF MEXICO, UNITED STATES WATERS. 41 P.

BIBL GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, TAMPA, FL.

KEYW REPTILIA

BIOLOGY

ECOLOGY

FEEDING HABIT

LIFE HISTORY

NESTING

REPRODUCTION

SPECIES COMPOSITION

TURTLE

ABST This report includes detailed information on the six species of seaturtles found in the Gulf of Mexico. Included for each species are topics on distribution, breeding habits, growth and mortality, foraging and food habits, migration and population status. In addition, distribution of seaturtles in the Gulf of Mexico and discussion of incidental captures in shrimp trawls are also included.

ANNO

06/09/1987

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ACC 2015
TYPE P
YEAR 1966
AUTH FUTCH, C.R.;
TITL THE STONE CRAB IN FLORIDA.

BIBL FLA. BD. CONSERV. MARINE LABORATORY, SALT WATER FISH, LEAFL. NO. 2. 6 P.

KEYW STONE CRAB FISHERY LIFE HISTORY
 FISHING GEAR

ABST This brief leaflet reviews information on the stone crab, *Menippe mercenaria*, and the stone crab fishery in Florida. A general description and classification of *M. mercenaria* is given, and similar species in Florida waters are described. The life history of the stone crab is summarized and fishing gear and methods are briefly described. The problems of future stone crab cultivation are cited.

ANNO

06/09/1987

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ACC 838

TYPE

YEAR 1974

AUTH GAIDRY, W.J.;

TITL CORRELATIONS BETWEEN INSHORE SPRING WHITE SHRIMP POPULATION DENSITIES AND O
VERWINTERING POPULATIONS.

BIBL LOUISIANA WILDLIFE AND FISHERIES COMMISSION, TECH. BULL. 12. 18 PP.

KEYW BENTHIC FAUNA

LIFE HISTORY

SHRIMP

ABST Biological samplings of offshore overwintering shrimp populations were compared mathematically to inshore spring white shrimp landings and possible correlations were examined. The samples were collected from 1970 to 1972.

ANNO

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ACC 219
TYPE
YEAR 1982
AUTH GALLAWAY, B.J.;LEWBEL, G.S.;
TITL THE ECOLOGY OF PETROLEUM PLATFORMS IN THE NORTHWESTERN GULF OF MEXICO: A COMMUNITY PROFILE.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, D.C. FWS/OBS-82/27. 106 P. (ALSO MINERALS MGMT SERVICE, GULF OF MEXICO).

KEYW BIOLOGY COASTAL WATER ECOLOGY
FISH HABITAT OFFSHORE DRILLING
OFFSHORE PLATFORM CONTINENTAL SHELF

ABST The primary objective of this community profile is to consolidate the ecological information pertaining to the interaction between petroleum platforms in the northwestern Gulf of Mexico and the resident biota. Offshore petroleum platforms represent a relatively new (and perhaps short-lived) biological habitat in the northwestern Gulf which is characterized by distinctive faunal assemblages and species associations. Characterizations of the total area and nature of petroleum platform habitats and a review of the pertinent biological literature are followed by descriptions of the biological assemblages in terms of their composition and community attributes. Some of the values of these biological resource units to man are then summarized. Finally, some of the management implications of the value judgements are presented and recommendations for preservation of the platform resource are provided.

ANNO

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ACC 4276
TYPE P
YEAR 1981
AUTH GALLAWAY, B.J.;
TITL AN ECOSYSTEM ANALYSIS OF OIL AND GAS DEVELOPMENT ON THE TEXAS-LOUISIANA CON
TINENTAL SHELF. BIOLOGICAL SERVICES PROGRAM.

BIBL LGL ECOLOGICAL RES. ASSOC., INC., BRYAN, TX. 100 P.

KEYW ECOSYSTEM	OIL AND GAS	OCEANOGRAPHIC
BIOLOGICAL	SHRIMP	CORAL
REEF	COMMUNITY	

ABST The Texas-Louisiana shelf ecosystem in the Gulf of Mexico is described in terms of its physiographic, oceanographic, and biological characteristics and as a recipient of oil and gas development activities and effluents. The northeast sector of the ecosystem is influenced by Mississippi River discharge, whereas high-salinity Caribbean water affects the southwest sector. Soft-bottom communities are prominent, characterized by economically valuable penaeid shrimps. The coral reef communities are more important than would normally be assumed. Pelagic communities are little known and harbor only a few commercially valuable species. Observed effects of oil and gas development activities and effluents are described.

ANNO

06/09/1987

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ACC 4041

TYPE P

YEAR 1954

AUTH GALTSOFF, P.S.;

TITL GULF OF MEXICO, ITS ORIGIN, WATERS, AND MARINE LIFE.

BIBL FISHERY BULLETIN OF THE FISH AND WILDLIFE SERVICE. 55(89):604 P.

KEYW GEOLOGY
CHEMISTRY
BIOLOGY

SEDIMENT
PHYSICAL OCEANOGRAPHY
SYSTEMATIC

METEOROLOGY
POLLUTION

ABST A comprehensive summary of scientific knowledge of the Gulf of Mexico was produced by a consortium of investigators. Each article pertaining to a particular taxonomic group was written by a recognized authority in his field; these are arranged with a few exceptions, in taxonomic order following a pre-established list of phyla, classes, and orders. Taxonomic groups covered range from bacteria, fungi, and unicellular algae to marine mammals. Each of these chapters provides a systematic account of species distribution and occurrence in the Gulf of Mexico. Plant and animal communities are also treated. Physics and chemistry discussions included tides, sea level, physical oceanography, light penetration, and distribution of chemical constituents. Geomorphology, sediments, and shoreline processes were described in the geology chapter. Water pollution is covered including descriptions of known damage to resources within the Gulf of Mexico. An historical review of scientific explorations in the Gulf of Mexico is also included.

ANNO

06/09/1987

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ACC 570

TYPE

YEAR 1973

AUTH GARRISON, L.E.; MARTIN, R.G.;

TITL GEOLOGIC STRUCTURES IN THE GULF OF MEXICO BASIN.

BIBL U.S. GEOLOGICAL SURVEY, PROF. PAP. NO. 773. 85 PP.

KEYW GEOLOGIC HISTORY
SEISMIC REFLECTION
TECTONIC

GEOLOGY
STRATIGRAPHY

OCEANOGRAPHY
STRUCTURE

ABST

ANNO

06/09/1987

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ACC 617

TYPE

YEAR 1976

AUTH GASTON, G.R.;

TITL LIFE HISTORY, DISTRIBUTION AND ABUNDANCE OF THE SAND DOLLAR, MELLITA QUINQU
IESPERFORATA (LESKE) NEAR DAUPHIN ISLAND, ALABAMA.

BIBL MASTER'S THESIS. UNIVERSITY OF ALABAMA, TUSCALOOSA, AL. 75 PP.

KEYW BENTHIC FAUNA

SEDIMENT

SALINITY

SEDIMENT TEXTURE

TEMPERATURE

LIFE HISTORY

ECHINODERM

ABST The sand dollar, *Mellita quinquesperforata* (Leske), population near Sand I
sland, Alabama was studied from August 1973 to August 1975, and the life hi
story, distribution and abundance of the sand dollars was described.

ANNO

06/09/1987

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ACC 754

TYPE

YEAR 1981

AUTH GATHOF, J.M.;

TITL THE COMPARATIVE FEEDING HABITS OF SPOEROIDES DORSALIS AND SPHOEROIDES SPENGLERI (PISCES: TETRAODONTIDAE).

BIBL MASTER'S THESIS. UNIVERSITY OF SOUTH ALABAMA, MOBILE, AL. 65 PP.

KEYW INVERTEBRATA

BIOLOGY

ECOLOGY

FEEDING HABIT

FISH

TAXONOMY

MAFLA

ABST Gut content analysis was conducted on 150 puffer fishes collected during the BLM-OCS MAFLA - Baseline study. Gut contents were analyzed using cluster analysis and results indicated ontogenetic changes in diet within each of the two species.

ANNO

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ACC 72

TYPE

YEAR 1967

AUTH GAUL, R.D.;

TITL CIRCULATION OVER THE CONTINENTAL MARGIN OF THE NORTHEAST GULF OF MEXICO.

BIBL PH.D. DISSERTATION. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 123 PP.

KEYW CIRCULATION
OCEANOGRAPHY

CONTINENTAL SHELF
PHYSICAL PROCESS

CURRENTS
LOOP CURRENT

ABST The ocean circulation over the continental margin of the northeast Gulf of Mexico has been delineated on the basis of three years of hydrographic and direct current observations. A wide range of measurement techniques was used at two fixed platforms in the nearshore region off Panama City, Florida, and from small vessels during periodic surveys conducted over a larger area. Evidence is presented for a close coupling between circulation over the continental margin and that in deeper water. The "loop" current, which transports water into the Gulf from the Yucatan Channel, is identified on the basis of water mass characteristics as far north as the edge of the northeast continental slope. Lateral mixing with waters over the continental margin is evidenced by smooth transitions of salinity-temperature relations characterizing offshore and nearshore waters. It is suggested that the loop current is the main driving influence for circulation over the continental margin, especially below the seasonal thermocline. Flow over the continental margin is modified markedly by ocean bottom topography. De Soto Canyon, the most prominent single bathymetric feature, appears to have a dominant influence on replenishment of water in the lower layer over the shelf. A zone of horizontal transition in hydrography and currents has been noted along the break between shelf and slope, especially during the spring months when stratification over the shelf is incipient.

ANNO

06/09/1987

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ACC 4311
TYPE P
YEAR 1965
AUTH GAUL, R.D.;BOYKIN, R.E.;
TITL NORTHEAST GULF OF MEXICO HYDROGRAPHIC SURVEY DATA COLLECTED IN 1964.

BIBL 2 P.

KEYW HYDROGRAPHIC CONTINENTAL SHELF PHYSICAL
 CIRCULATION CONTINENTAL SLOPE

ABST The report summarizes data collected during periodic hydrographic surveys made in 1964 over the continental shelf and slope of the northeast Gulf of Mexico. The survey region extends from the Mississippi Delta to Cape San Blas (about 200 nautical miles) and offshore to the 1000 fathom depth contour (100 to 110 nautical miles). The surveys serve two primary purposes. One is to provide "background" information on the physical environment over the shelf to aid in interpretation of phenomena observed in the vicinity of nearshore platforms off Panama City (Gaul et al., 1963). The second is to study the distribution of physical properties as related to circulation over and outside the shelf.

ANNO

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ACC 4312
TYPE P
YEAR 1964
AUTH GAUL, R.D.;BOYKIN, R.E.;
TITL NORTHEAST GULF OF MEXICO HYDROGRAPHIC SURVEY DATA COLLECTED IN 1963.

BIBL 2 P.

KEYW	HYDROGRAPHIC	PHYSICAL	CIRCULATION
	FISH	FOULING	

ABST The survey region extends from the Mississippi Delta to Cape San Blas (about 200 nautical miles) and offshore to the 200 fathom depth contour (50 to 70 nautical miles). The surveys serve two primary purposes. One is to provide "background" information on the physical environment over the shelf to aid in interpretation of phenomena observed in the vicinity of nearshore platforms off Panama City (Gaul et al., 1963). The second is to study the distribution of physical properties as related to circulation over and outside the shelf. Studies of environmental influences on the distribution and occurrence of pelagic fishes (Vick, 1964) and "fouling" organisms (Gaul and Vic, 1964; Pequegnat, Gaul and Dean, 1964) also depend on survey data.

ANNO

06/09/1987

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ACC 466

TYPE

YEAR 1976

AUTH GEARING, P.;GEARING, J.N.;LYTLE, T.F.;LYTLE, J.S.;

TITL HYDROCARBONS IN 60 NORTHEAST GULF OF MEXICO SHELF SEDIMENTS: A PRELIMINARY SURVEY.

BIBL GEOCHEM. COSMOCHIM. ACTA 40:1005-1017.

KEYW ALIPHATIC COMPOUNDS
HYDROCARBON

CHEMISTRY
SEDIMENT

CONTINENTAL SHELF

ABST

ANNO

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ACC 4318
TYPE P
YEAR 1977
AUTH GEBELSEIN, C.D.;
TITL DYNAMICS OF RECENT CARBONATE SEDIMENTATION AND ECOLOGY: CAPE SABLE, FLORIDA

BIBL LEIDEN, NETH. E. J. BRILL. 244 PP.

KEYW CARBONATE	SEDIMENT	PHYSICAL
BIOLOGICAL	GEOLOGIC HISTORY	GEOLOGY

ABST The 3 aspects of the sedimentology of the subtidal, intertidal, and supratidal carbonate sediments in and around Lake Ingraham, Cape Sable, Florida, examined include the following: the nature of facies changes, processes and products of sedimentation, and organism-sediment interactions. Each of the facies found in the vertical section is being formed continuously in some part of the Cape complex. Thus both product and process are studied concurrently to determine why facies changes exist and what physical and biological factors control facies distribution. Cape Sable is unusual in that a clear-cut datum level exists in the depositional record. Opening of man-made canals in 1922 connected Lake Ingraham to Florida Bay and the Gulf of Mexico and drastically changed sedimentation style in the entire Cape complex. This event is clearly recorded in the sediments and allows long-term integration of sedimentation rates throughout the complex. The study is presented under the following headings: area description; methods; physical environment; description of sedimentary environments (subtidal muds, open mud flats, ponded mud flats, mangrove flats, marl prairies, and inland lagoons); total sediment budget; and discussion (sedimentary facies, trends in organism abundance and diversity, bed type and relation to sedimentation event, sequence of facies, implication of sedimentary rates, diagenesis, comparison with the Northwest Andros Island flats and Persian Gulf Tidal flats, and comparison with Ancient tidal flat sediments). (FT)

ANNO

06/09/1987

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ACC 4196

TYPE P

YEAR 1975

AUTH GEORGE, R.Y.;

TITL POTENTIAL EFFECTS OF OIL DRILLING AND DUMPING ACTIVITIES ON MARINE BIOTA.

BIBL ENVIRON. ASPECTS CHEM. USE WELL-DRILL OPER. CONF. PROC. 333-356.

KEYW DRILLING

OFFSHORE

DRILLING FLUID

DRILLING MUD

ABST

ANNO

ACC 4042

TYPE P

YEAR 1983

AUTH GETTER, C.D.;MICHEL, J.;SCOTT, G.I.;SADD, J.L.;BALLOU, T.G.

TITL THE SENSITIVITY OF COASTAL ENVIRONMENTS AND WILDLIFE TO SPILLED OIL IN SOUTH FLORIDA.

BIBL PREPARED FOR THE STATE OF FLORIDA DEPARTMENT OF VETERAN AND COMMUNITY AFFAIRS, DIV. OF LOCAL RESOURCE MANAGEMENT. TALLAHASSEE, FL. 125 P.

KEYW COASTAL	INTERTIDAL	HABITAT
MANAGEMENT	OIL SPILL	SEAGRASS
REEF	MAMMAL	SEABIRD

ABST A shoreline assessment was conducted throughout South Florida by means of aerial overflights, ground stations, and literature review. A series of maps, this report, and data supplements were produced. The first subject of this report was to describe environments and wildlife which appear on the maps. Special features related to placing booms, skimmers, and access for cleanup during oil spills are also shown on maps and discussed in this report in detail. Additional detail is given in this report concerning cleanup techniques. Also described are resources which are more variable in their sensitivity to oil usually being less sensitive since they are either underwater habitats or animals capable of avoiding oiled areas: Coral Reefs, Seagrass Beds, Whales and Dolphins, Marine Fisheries. Marshes, sand beaches, and man-made structures are the dominant shorelines of South Florida. The barrier island system from Grant to Key Biscayne affords protection of inner more oil-sensitive environments within the Intracoastal Waterway and northern Biscayne Bay. Oil which physically impacts these outer beaches would be relatively easy to clean, and these efforts would be aided by natural processes (waves and currents). Efforts to protect the inner bays and waterways should be concentrated at the large inlets which connect inner bays and waterways to the Straits of Florida and the Atlantic Ocean. In general, oil spill protection in South Florida involves oceangoing skimmers at the spill site (first line of defense), deflection booms at inlets, channels, and creeks (second line of defense, and containment booms across canals i

ANNO

06/09/1987

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ACC 4043
TYPE P
YEAR 1983
AUTH GETTER, C.D.;MICHEL, J.;BALLOU, T.G.;
TITL THE SENSITIVITY OF COASTAL ENVIRONMENTS AND WILDLIFE TO SPILLED OIL IN WEST
PENINSULAR FLORIDA.

BIBL PREPARED FOR THE STATE OF FLORIDA DEPARTMENT OF VETERAN AND COMMUNITY AFFAI
RS, DIVISION OF LOCAL RESOURCE MANAGEMENT. TALLHASSE, FL. 115 P
KEYW COASTAL HABITAT MANAGEMENT
OIL SPILL SEAGRASS MAMMAL
INTERTIDAL SEABIRD

ABST A shoreline assessment was conducted throughout West Peninsular Florida by means of aerial overflights, ground stations, and literature review. A series of maps, this report, and six data supplements were produced. The first subject of this report is to describe the environments and wildlife which appear on the maps. Special features related to placing booms, skimmers, and access for cleanup during oil spills are also shown on the maps and discussed in this report in detail. Additional detail is given in this report concerning cleanup techniques. Also described are resources which are variable in their sensitivity to oil, usually being less sensitive since they are either subtidal habitats or animals capable of avoiding oiled areas: sea grass beds, whales and dolphins, marine fisheries.

ANNO

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ACC 4205
TYPE P
YEAR 1980
AUTH GETTLESON, D.A.; LAIRD, C.E.; PUTT, R.E.; ABBOTT, R.E.;
TITL ENVIRONMENTAL MONITORING ASSOCIATED WITH A PRODUCTION PLATFORM IN THE GULF
OF MEXICO.

BIBL IN: PROC. 12TH ANNU. OFFSHORE TECH. CONF. 1:263-270.

KEYW CURRENTS	SEDIMENT	BARIUM
WATER COLUMN	DRILLING MUD	DISTRIBUTION
CHROMIUM	REMOTE SENSING	PHOTODOCUMENTATION

ABST The results of a marine environmental monitoring program associated with drilling operations from a production near Baker Bank in the northwestern Gulf of Mexico are described. The study represents the first environmental monitoring program conducted in the Gulf of Mexico for a production platform located near a sensitive biological area. Current direction and velocity data amounts of sediment and associated barium and chromium levels deposited in sediment traps, bottom sediment barium and chromium levels, and water column data were used to assess the dispersion and distribution characteristics of discharged drilling muds. Television video-tapes and still-camera photographs were used to record the abundance, distribution and health of the biota associated with Baker Bank. The monitoring program showed that the prevailing near-bottom current was to the southwest, away from Baker Bank. Components in the direction of the Bank were rarely sufficient to transport discharged drilling muds to the Bank. Sediment and water column data also indicated that no drilling muds were transported to the Bank. Camera observations showed no discernable changes in the Bank's biota during the period of the study.

ANNO

06/09/1987

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ACC 4248
TYPE P
YEAR 1981
AUTH GETTLESON, D.A.;
TITL BIOLOGICAL ASSEMBLAGES (LIVE BOTTOM) ASSOCIATED WITH HARD BOTTOM AREAS IN THE GEORGIA EMBAYMENT AND EASTERN GULF OF MEXICO.

BIBL BIENNIAL INTERNATIONAL ESTUARINE RESEARCH CONFERENCE. GLENEDEN BEACH, FLORIDA (USA) 1-5 NOV. 1981. ESTUARIES 4(3):304.

KEYW BIOLOGICAL	ASSEMBLAGE	LIVE BOTTOM
SIDE SCAN SONAR	PORIFERA	POLYCHAETE
MOLLUSC	CRUSTACEAN	ECHINODERM

ABST Four oil and gas lease blocks on the South Carolina-Georgia continental shelf and six lease blocks and five east-west transects on the west Florida continental shelf were surveyed with a precision depth recorder, side scan sonar, and subbottom profiler for the purpose of identifying and mapping areas of hard bottom. Television, videotapes, still camera photographs, and dredge samples were used to characterize the biological assemblages (live bottom) associated with the hard bottom. The assemblages were composed primarily of representatives from the following major taxa: Porifera, Cnidaria, Chlorophyta, Phaeophyta, Rhodophyta, and Ascidiacea. A number of species of polychaetes, molluscs, crustaceans, and echinoderms were also directly associated with the hard bottom.

ANNO

06/09/1987

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ACC 4255

TYPE P

YEAR 1981

AUTH GETTLESON, D.A.;HAMMER, R.M.;LAIRD, C.E.;PUTT, R.E.;

TITL ENVIRONMENTAL MONITORING OF THREE EXPLORATORY OIL AND GAS WELLS DRILLED NEAR THE EAST FLOWER GARDEN BANK IN THE GULF OF MEXICO. THIRTEENTH ANNUAL OFFSHORE TECHNOLOGY CONFERENCE, HOUSTON, TX (USA) 4 MAY 1981.

BIBL PROC. 13TH ANNU. OFFSHORE TECH. CONF. 2:475-486.

KEYW DRILLING
REEF

DISTRIBUTION
CORAL

DRILLING FLUID
SEDIMENT

ABST The results of two marine environmental monitoring programs associated with the drilling of three exploratory wells near the East Flower Garden Bank on the outer continental shelf of the northwest Gulf of Mexico are described. The purpose of the monitoring programs was to define the spatial distribution of the discharged drilling fluids relative to the Bank and assess the apparent health of the predominant reef-building corals of the East Flower Garden Bank before, during, and after the drilling operations. The monitoring programs demonstrated that detectable quantities of the drilling fluids in the surficial sediments were distributed to a distance exceeding 1000 meters from the shunted wells and between 1000 to 2000 meters from the near-surface discharged well. No evidence of drilling fluids was detected within the Coral Reef Zone of the Flower Garden Bank. The survey results also demonstrated that the drilling operations had no apparent effect on the corals at the monitored sites.

ANNO

.....
ACC 4266
TYPE P
YEAR 1978
AUTH GETTLESON, D.A.;
TITL ECOLOGICAL IMPACT OF EXPLORATORY DRILLING: A CASE STUDY.

BIBL PRESENTED AT ENERGY/ENVIRONMENT '78 LOS ANGELES (USA) 22 AUGUST 1978.
SOC. PETROL. INDUSTRY BIOLOGISTS.

KEYW DRILLING DRILLING FLUID DRILL CUTTING
CORAL CURRENT REEF

ABST The results of a marine environmental monitoring program associated with the drilling of two exploratory wells near the East Flower Garden Bank located on the outer continental shelf of the northwest Gulf of Mexico are described. The monitoring program consisted of (1) defining the spatial distribution of discharged drilling fluids and cuttings relative to the drillsite, and (2) assessing the apparent health of predominant reefbuilding corals of the East Flower Garden Bank before, during and after drilling operations. Current direction and velocity amounts of sediment and associated barium levels deposited in sediment traps, bottom sediment barium levels and water column transmissivity data were used for realtime and post-drilling assessment of the dispersion and distribution of discharged drilling fluids and cuttings. The monitoring program demonstrated that a portion of the drilling fluids and cuttings were distributed to a distance exceeding 1000 meters from the drillsite by a low velocity water current along the bottom. However, no evidence of the drilling fluids and/or cuttings was detected at the monitored sites within the Coral Reef Zone. The survey results also demonstrated that the drilling operations had no apparent effect on the corals of the monitored sites.

ANNO

06/09/1987

.....
ACC 4273

TYPE P

YEAR 1981

AUTH GETTLESON, D.A.; PUTT, R.E.; HAMMER, R.M.; LAIRD, C.E.;

TITL ENVIRONMENTAL MONITORING OF THREE EXPLORATORY OIL AND GAS WELLS DRILLED NEAR THE EAST FLOWER GARDEN BANK IN THE GULF OF MEXICO.

BIBL OFFSHORE TECHNOL. CONF. (UNITED STATES) 2:475-48.

KEYW DRILLING

CONTINENTAL SHELF

DISTRIBUTION

DRILLING FLUID

REEF

CORAL

SEDIMENT

ABST The results of two marine environmental monitoring programs associated with the drilling of three exploratory wells near the East Flower Garden Bank on the outer continental shelf of the northwest Gulf of Mexico are described. The purpose of the monitoring programs was to define the spatial distribution of the discharged drilling fluids relative to the Bank and assess the apparent health of the predominant reef-building corals of the East Flower Garden Bank before, during, and after the drilling operations. The monitoring programs demonstrated that detectable quantities of the drilling fluids in the surficial sediments were distributed to a distance exceeding 1000 meters from the near-surface discharged well.

ANNO

06/09/1987

.....
ACC 4274
TYPE P
YEAR 1980
AUTH GETTLESON, D.A.; LAIRD, C.E.;
TITL BENTHIC BARIUM LEVELS IN THE VICINITY OF SIX DRILL SITES IN THE GULF OF MEX
ICO.

BIBL CONTINENTAL SHELF ASSOCIATES, INC., TEQUESTA, FL. 739-788.

KEYW BARIUM	DRILLING FLUID	BENTHIC
DISTRIBUTION	DRILLING MUD	HYDROGRAPHIC
DRILL CUTTING		

ABST Barium sulfate (barite) is a major constituent of drilling fluids, often comprising 80 to 90 percent by weight of the chemical components added to offshore wells in the Gulf of Mexico. It is primarily used to control the density of drilling fluids. Barium, which makes up 49 percent of barium sulfate by weight, was used as a tracer of discharged drilling fluids to map the benthic distribution and concentration of discharged drilling muds in the vicinity of five exploratory drill sites and a single production platform in the Gulf of Mexico. The discharges from three of the five exploratory wells and the production platform were shunted through a downpipe that terminated approximately ten meters from the bottom. The distances that barium is dispersed as well as its benthic concentrations appear to be dependent on at least the following factors: (1) the types and quantities of drilling fluids discharged, (2) the hydrographic conditions at the time of the discharges, and (3) the height above the bottom that the discharges are made. Barium analyses indicate that drilling fluids can be dispersed in detectable quantities at least 1000 meters and probably further, from both shunted and unshunted wells.

ANNO

06/09/1987

.....
ACC 291
TYPE
YEAR 1973
AUTH GEYER, R.A.; SWEET, W.M.;
TITL NATURAL HYDROCARBON SEEPAGE IN THE GULF OF MEXICO.

BIBL TRANS., GULF COAST ASSOC. GEOL. SOC. 23:158-169.

KEYW GEOLOGY OIL RESOURCE
HYDROCARBON

ABST

ANNO

06/09/1987

.....
ACC 4044

TYPE P

YEAR 1972

AUTH GIAM, C.S.; HANKS, A.R.; RICHARDSON, R.L.; SACKETT, W.M.; WONG; M.K.;

TITL DDT, DDE, AND POLYCHLORINATED BIPHENYL IN BIOTA FROM THE GULF OF MEXICO AND
CARIBBEAN SEA - 1971.

BIBL PEST. MON. J. 6(3):139-143.

KEYW CHEMISTRY

FISH

SHRIMP

BIOLOGY

INVERTEBRATE

CRAB

POLLUTION

PESTICIDE

COASTAL WATER .

ABST Residue levels of DDT, DDE, and PCB's were determined in various species of fish, shrimp, crabs, and other biota from the Gulf of Mexico and Caribbean Sea. Samples were collected from the Gulf during two Gulf-wide cruises in May and October 1971 and from part of the Caribbean Sea during the October cruise. DDT, DDE, and PCB's were found widely distributed in all biota, samples were found widely distributed in all biota; however, samples from coastal areas generally had higher levels than samples from the open waters.

ANNO

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ACC 4045
 TYPE P
 YEAR 1978
 AUTH GIAMMONA, C.P., JR.;
 TITL OCTOCORALS IN THE GULF OF MEXICO--THEIR TAXONOMY AND DISTRIBUTION WITH REMA
 RKS ON THEIR PALEONTOLOGY.

BIBL PH.D. DISSERTATION. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 260 P.

KEYW CORAL	DISTRIBUTION	SYSTEMATIC
ZOOGEOGRAPHY	BIOLOGY	EPIFAUNA
INVERTEBRATE	ECOLOGY	OCTOCORALLIA

ABST The distribution of octocorals in the Gulf of Mexico is reviewed in this paper. The taxonomy, ecology, and paleontology of this group from along the Texas Gulf coast are emphasized. The distribution of Gulf octocoral families and genera presenting 622 specimens are plotted on 35 separate charts. They represent 22 families, 59 genera, and 152 species. The biotic assemblages and ecology of octocorals along the Texas outer continental shelf were studied using a submersible and conventional diving technique. Abiotic environmental factors, particularly turbidity from the nepheloid layer, affect small-scale distributions, abundance, and diversity of the hard-bank communities on the Texas continental shelf. Biotic factors such as dispersal, predation, competition, and behavior reactions may also influence distribution patterns. Ecological factors such as temperature, substrate type, and depth probably have the most influence on large-scale distribution patterns in the Gulf. The Gulf is divided into 61 geographic subunits, and the species collected from each subunit are listed. A classification method of numerical analysis is used to determine octocoral distribution patterns within the Gulf of Mexico. On that basis, six octocoral provinces are defined: 1) sub-tropical Gulf, 2) western Florida, 3) northern Gulf, 4) western Gulf, 5) southeast Mexican coast, and 6) central Gulf. Thirty-five fossil octocoral stem fragments and holdfasts were collected from the Stone City Formation (Claiborne group, middle Eocene) near College Station, Texas. The fossils belong to the order Gorgonacea. They represent the fifth reported oc

ANNO

06/09/1987

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ACC 1082

TYPE

YEAR 1931

AUTH GINSBURG, I.;

TITL ON THE DIFFERENCES IN HABITAT AND SIZE OF CYNOSCION ARENARIUS AND CYNOSCION
NOTHUS.

BIBL COPEIA 1931(3):144.

KEYW BIOLOGY

FISHERY

HABITAT

ECOLOGY

LIFE CYCLE

LENGTH

FISH

LIFE HISTORY

ABST

ANNO

06/09/1987

.....
ACC 2016
TYPE P
YEAR 1964
AUTH GINSBURG, R.N.; SHINN, E.A.;
TITL DISTRIBUTION OF THE REEF BUILDING COMMUNITY IN FLORIDA AND THE BAHAMAS.

BIBL AM. ASSOC. PETROL. GEOL. BULL. 48:527.

KEYW DISTRIBUTION	DIVERSITY	CORAL
WAVE	CIRCULATION	SALINITY
TEMPERATURE	SUSPENDED	SEDIMENT
REEF		

ABST The distribution and diversity of coral reefs surrounding Florida and the Bahamas are reviewed. Reasons are given for the most luxuriant and continuous reef communities occurring along eastern facing margins of the Florida and Bahamas platforms. These factors include wave action, water circulation, salinity, water temperature, and suspended sediments. Western margins support small, discontinuous reefs with lower diversities due to the unfavorable qualities of these parameters.

ANNO

06/09/1987

.....
ACC 2408
TYPE P
YEAR 1953
AUTH GINSBURG, R.N.;
TITL INTERTIDAL EROSION ON THE FLORIDA KEYS.

BIBL BULL. MAR. SCI. GULF CARIBB. 3(1):55-69.

KEYW MONROE CARBONATE BENTHIC
 SPONGE SEDIMENT

ABST Examples of erosion of intertidal calcareous rock in the Florida Keys were described. Physiochemical dissolution of calcium carbonate was only responsible for localized intertidal erosion. Large scale honeycombing of calcareous rock was due primarily to boring and burrowing activities of benthic organisms. A partial list of boring and burrowing organisms, including a family of boring sponges (Clionidae), 3 sipunculans, a barnacle, 2 bivalves, and an echinoid, was given, and their specific effects on erosion were cited.

ANNO

06/09/1987

.....
ACC 2409

TYPE P

YEAR 1956

AUTH GINSBURG, R.N.;

TITL ENVIRONMENTAL RELATIONSHIPS OF GRAIN SIZE AND CONSTITUENT PARTICLES IN SOME
SOUTH FLORIDA CARBONATE SEDIMENTS.

BIBL BULL. AM. ASSOC. PETROL. GEOL. 40(10):2384-2427.

KEYW MONROE
SEDIMENT

GRAIN SIZE
REEF

CARBONATE

ABST An analysis was conducted of sediments taken from two areas around the Florida Bay area in an attempt to show that the distribution of sediment producing organisms can be found using grain size and constituents of the calcareous sediments deposited. In one area the physical environment varied so greatly that no distinct distribution of organism could be ascertained. However, in a reef area changes in the environments were gradual, thereby allowing flora and fauna changes to appear in the sediment analysis. The thin sectioning approach used here can also be used to analyze ancient limestones in similar types of studies.

ANNO

06/09/1987

.....
ACC 2410
TYPE P
YEAR 1972
AUTH GINSBURG, R.N. (ED.);
TITL SOUTH FLORIDA CARBONATE SEDIMENTS. SEDIMENTA II.

BIBL COMPARATIVE SEDIMENTOLOGY LABORATORY, UNIV. OF MIAMI, FISHER ISLAND STATION
, MIAMI BEACH, FL. 72 P.

KEYW MONROE CARBONATE SEDIMENT
BATHYMETRY GEOLOGY

ABST This publication serves as a field trip guidebook to the Recent carbonate s
ediments of Florida Bay and Florida Reef Tract. The sedimentation and wate
r circulation patterns, sediment composition, and molluscan fauna of Florid
a Bay are described. The corals and coralline algae of the reef tract are
identified and their ecology and roles in sedimentation are summarized. Ro
driguez Bank is used as an illustration of zonation of sediment producing
plants and animals. Also covered in the guidebook are spur and grove forma
tion in the reef tract, Pleistocene limestones of the Florida Keys, recent
dolomite of Sugarloaf Key, and bathymetry and geology of Pourtales Terrace.

ANNO

06/09/1987

.....

ACC 2411

TYPE P

YEAR 1958

AUTH GINSBURG, R.N.;LOWENSTAM, H.A.;

TITL THE INFLUENCE OF MARINE BOTTOM COMMUNITIES ON THE DEPOSITIONAL ENVIRONMENT
OF SEDIMENTS.

BIBL J. GEOL. 66:310-318.

KEYW MONROE
PHYSICAL

BENTHIC

SEDIMENT

ABST The effects of benthic fauna on the sediment environment was studied in Florida Bay. The ability of organisms other than reef builders to control or modify their physical environment was described. The organisms cause recognizable differences in sediment and other organisms.

ANNO

06/09/1987

.....
ACC 2018
TYPE P
YEAR 1973
AUTH GODCHARLES, M.F.;JAAP, W.C.;
TITL FAUNA AND FLORA IN HYDRAULIC CLAM DREDGE COLLECTIONS FROM FLORIDA WEST AND
SOUTHEAST COASTS.

BIBL FLA. ST. DEPT. NAT. RESOURCES, LAB. SPEC. SCI. REPT. NO. 40. 89 P.

KEYW MOLLUSC CRUSTACEAN DISTRIBUTION
DREDGING

ABST Live flora and fauna specimens were collected, identified, and counted from stations along the west and southeast coasts of Florida. Four hundred fifty three taxa of marine flora and fauna were identified. These specimens were taken from depths of 0.9 to 24.4 m. The majority of the reported taxa were molluscs and crustaceans. All specimens were listed in locality, depth, and numbers collected.

ANNO

06/09/1987

.....
ACC 4046

TYPE P

YEAR 1973

AUTH GODCHARLES, M.F.; JAAP, W.C.;

TITL EXPLORATORY CLAM SURVEY OF FLORIDA NEARSHORE AND ESTUARINE WATERS WITH COMMERCIAL HYDRAULIC DREDGING GEAR.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. PROF. PAP. SER. NO. 21. 77 P.

KEYW BIOLOGY COASTAL MOLLUSCA
DISTRIBUTION COMMERCIAL FISHERY INFAUNA
BENTHIC DREDGING

ABST Distribution and abundance of commercial clams were investigated, using a hydraulic Nantucket clam dredge and a Maryland soft-shell escalator clam dredge at 846 stations along the west and southeast coasts of Florida, during 1970 and 1971. Sunray venus clams, *Macrocallista nimbosa*, occurred along the entire west coast but were more abundant north of Tampa Bay and were found in commercial quantities only on the existing commercial Bell Shoal bed.

Southern quahogs, *Mercenaria campechiensis*, were most abundant near passes along central and southwest Florida. In bays, both species were usually associated with seagrasses, but this was not noted in open Gulf collections. Both species were seldom collected beyond 9.2 m depths. The most abundant bivalves was the marsh clam, *Rangia cuneata*, confined to brackish areas of the Peace and Myakka Rivers. At lower salinities *R. cuneata* were larger and had more size classes.

ANNO

06/09/1987

.....
ACC 2412
TYPE P
YEAR 1979
AUTH GOFORTH, H.W.;THOMAS, J.R.;
TITL PLANTING OF RED MANGROVES (RHIZOPHORA MANGLE L.) FOR STABILIZATION OF MARL
SHORELINES IN THE FLORIDA KEYS.

BIBL IN: D.P. COLE (ED.), WETLANDS RESTORATION AND CREATON: PROC. OF SIXTH ANNU.
CONF. MAY 16, 1979, TAMPA, FL. 357 P.
KEYW MONROE FLORA

ABST Three developmental stages of red mangroves (i.e., propagules, seedlings, and small trees) were planted to provide erosion protection along three separate sections of marl shoreline at Key West, Florida. Transplants of small mangrove trees were highly successful in all three shorelines and exhibited the highest survival of the three stages. Degree of exposure to erosion and/or burial proved most important in determining seedling survival.

ANNO

06/09/1987

.....

ACC 2017
TYPE P
YEAR 1978
AUTH GOLDBERG, E.D. ET AL.;
TITL THE MUSSEL WATCH.

BIBL ENVIR. CONSERV. 5(2):101-125.

KEYW	PETROLEUM	HYDROCARBON	POLLUTION
	COASTAL	POLLUTANT	MOLLUSC

ABST The levels of 4 sets of pollutants (heavy metals, artificial radionuclides, petroleum components, and halogenated hydrocarbons) were measured in U.S. coastal waters, using bivalves as sentinel organisms for indicating levels of pollutants. The strategies of carrying out this program were outlined and the results from the first year's work were reported. Varying degrees of pollution in U.S. coastal waters were indicated by elevated levels of pollutants in the bivalves, comprised by certain species of mussels (*Mytilus*) and oysters (*Ostrea*; *Crassostrea*) and collected at over 100 localities.

ANNO

06/09/1987

.....
ACC 2413
TYPE P
YEAR 1971
AUTH GOLDBERG, W.M.;
TITL A NOTE ON THE FEEDING BEHAVIOR OF THE SNAPPING SHRIMP SYNALPHEUS FRITZMUELL
ERI COUTIERE.

BIBL CRUSTACEANA.

KEYW MONROE BEHAVIOR SHRIMP
 FEEDING HABIT

ABST The feeding behavior of the snapping shrimp, *Synalpheus fritzmuelleri*, was described from specimens inhabiting the base of sea fans (*Gorgonia ventalina*) collected from the Fowey Rocks area of the northern Florida Keys. Use of the chelipeds, shell opening methods, and prey items are discussed.

ANNO

06/09/1987

.....

ACC 2544

TYPE P

YEAR 1973

AUTH GOLDBERG, W.;

TITL ECOLOGICAL ASPECTS OF SALINITY AND TEMPERATURE TOLERANCES OF SOME REEF-DWELLING GORGONIANS FROM FLORIDA.

BIBL CARIBB. J. SCI. 13(3-4):173-177.

KEYW SALINITY
STRESS

TEMPERATURE

GORGONIAN

ABST Optimal, marginal, and terminal extremes for salinity and temperature were determined for each of 6 species of reef-dwelling organisms. Comparisons were made with scleractinian tolerances, and it was concluded that although both groups had similar temperature ranges, gorgonians were somewhat more stenohaline. Examples of ecological restriction by thermal and saline extremes were discussed.

ANNO

06/09/1987

.....
ACC 2545
TYPE P
YEAR 1970
AUTH GOLDBERG, W.M.;
TITL SOME ASPECTS OF THE ECOLOGY OF THE REEFS OFF PALM BEACH COUNTY, FLORIDA, WITH EMPHASIS ON THE GORGONACEA AND THEIR BATHYMETRIC DISTRIBUTION.

BIBL MASTER'S THESIS. FLORIDA ATLANTIC UNIVERSITY, BOCA RATON, FL.

KEYW	ECOLOGY	REEF	GORGONIAN
	DISTRIBUTION	TEMPERATURE	SALINITY
	DO	TURBIDITY	CURRENTS
	LIGHT		

ABST An investigation of gorgonian populations was made from the three reef terraces located off southern Palm Beach County, Florida. Temperature tolerance tests indicated that the gorgonians were somewhat eurythermal. It was assumed that temperature did not limit gorgonian distribution. It was likewise concluded that salinity does not affect the bathymetric distribution of these animals. Current data revealed that strong bottom currents were rare and thus could not affect the distribution of gorgonian populations significantly. Current was, however, responsible for the orientation of some species. Turbidity was also discounted as a factor in the distribution of gorgonians.

ANNO

06/09/1987

.....
ACC 4325

TYPE P

YEAR 1973

AUTH GOLDEN, J.H.;

TITL SCALE INTERACTION IMPLICATIONS FOR THE WATERSPOUT LIFE-CYCLE.

BIBL BOSTON AMER. METEOROL. SOC. :207-212.

KEYW STORM

METEOROLOGICAL

WIND

ABST

ANNO

06/09/1987

.....

ACC 4326

TYPE P

YEAR 1974

AUTH GOLDEN, J.H.;

TITL LIFE CYCLE OF FLORIDA KEYS' WATERSPOUTS, PT. 1.

BIBL J. APPL. METEOROL. 13(6):676-692.

KEYW STORM

METEOROLOGY

WIND

ABST

ANNO

06/09/1987

.....
ACC 935

TYPE

YEAR 1972

AUTH GOODYEAR, A.C.;WARREN, L.O.;

TITL FURTHER OBSERVATIONS ON THE SUBMARINE OYSTER SHELL DEPOSITS OF TAMPA BAY.

BIBL FLA. ANTHROP. 25:52-66.

KEYW COASTAL WATER
SOCIOECONOMIC

OYSTER
DISTRIBUTION

REEF
MOLLUSC

ABST

ANNO

06/09/1987

.....
ACC 4047
TYPE P
YEAR 1982
AUTH GORDON, D.J.;
TITL SYSTEMATICS AND DISTRIBUTION OF LARVAL FISHES OF THE SUBFAMILY OPHIDIINAE (PISCES, OPHIDIIDAE) IN THE EASTERN GULF OF MEXICO.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL. 121 P.

KEYW	ICTHYOPLANKTON	SEASONALITY	DISTRIBUTION
	FISH	BIOLOGY	SYSTEMATIC
	WATER COLUMN		

ABST Samples of ichthyoplankton from 15 survey cruises conducted from 1971 to 1974 in the eastern Gulf of Mexico shelf and slope region were examined for larvae of the subfamily Ophidiinae. Larvae were identified to the lowest possible taxonomic level. The developmental morphology, osteology and pigmentation is described, as is the seasonal, bathymetric and geographical distribution of the larvae. The systematic value of larval character states in this groups is discussed. Eight types of larvae were isolated. Larvae of the species *Otophidium omostigmum*, *Ophidion selenops*, *Lepophidium jeannae*, and *Lepophidium staurophor* were identified. Three types of larvae could not be identified to a single species; each represents a mixture of more than one species. *Ophidion* Type 1 larvae represent larvae of the species *Ophidion holbrooki*, *O. beani* and an undescribed species of *Ophidion*. *Ophidion* Type 2 larvae represent larvae of the species *Ophidion welshi* and *Ophidion grayi*. *Lepophidium* Type 1 larvae represent larvae of the species *Lepophidium graellsii* and *L. marmoratum*. Another kind of larva, designated Type A, belongs to either *Otophidium dormitator* or an unknown ophidiin species. Within a type of larva, significant differences in the abundance of larvae were found between depths and between seasons. Peaks in abundance occurred in spring and fall in larvae of *Ophidion selenops* and *Ophidion* Type 1 and Type 2, with decreased numbers present in August and winter months. Larvae of *Otophidium omostigmum* and *Lepophidium* were found in greater abundance in May, with no well defined trend apparent during the rest of the year.

ANNO

06/09/1987

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ACC 2188

TYPE P

YEAR 1978

AUTH GORE, R.H.; SCOTTO, L.E.; BECKER, L.J.;

TITL COMMUNITY COMPOSITION, STABILITY, AND TROPHIC PARTITIONING IN DECAPOD CRUSTACEANS INHABITING SOME SUBTROPICAL SABELLARIID WORM REEFS.

BIBL BULL. MAR. SCI. 28(2):221-248.

KEYW COMMUNITY

CRUSTACEAN

DECAPOD

FEEDING HABIT

ABST A survey of the decapod and stomatopod crustaceans inhabiting the sabellariid biotope resulted in 92 species of 52 genera and 22 families. Species composition and the relative abundance and occurrence of the numerically important species were similar for the duration of the study. Gut content analyses and predator-prey relationships among dominant species indicated that all feed to some extent on the sabellariid worms which construct the substratum of the biotope. In addition, it was determined from the nutritional needs among the dominant species that trophic partitioning occurs. The distribution of the 3 dominant crustaceans along the central eastern Florida coastline was shown to follow that of the sabellariid worm itself.

ANNO

06/09/1987

.....
ACC 2197
TYPE P
YEAR 1977
AUTH GORE, R.H.;
TITL DECAPOD CRUSTACEAN COMMUNITY STRUCTURE AND COMPOSITON IN DRIFT ALGAE--SEAGRASS BIOTOPES IN THE INDIAN RIVER, FLORIDA.

BIBL AM. ZOOL. 17(4):920.

KEYW DECAPOD	COMMUNITY	DRIFT ALGAE
SEAGRASS	SHRIMP	BIOMASS
CRUSTACEAN		

ABST Sampling of the study area produced nearly 60,000 decapod crustaceans comprised of 31 species and 14 families. The decapod community was dominated by 5 species. Two alpheid shrimp and a majid crab were also determined to be numerically important benthic species. Positive correlation was found to exist between seagrass-drift algae biomass and the number of decapod; (A) species; (B) individuals; and (C) total crustacean biomass. Data indicated that a complex community trophic structure exists.

ANNO

06/09/1987

ACC 4048

TYPE P

YEAR 1979

AUTH GORE, R.H.; SCOTTO, L.E.;

TITL CRABS OF THE FAMILY PARTHENOPIDAE (CRUSTACEA BRACHYURA: OXYRHYNCHIA) WITH NOTES ON SPECIMENS FROM THE INDIAN RIVER REGION IN FLORIDA. MEMOIRS OF THE HOURGLASS CRUISES. VOL. III, PART VI.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 98 P.

KEYW CRAB

BIOLOGY

CRUSTACEA

DISTRIBUTION

SYSTEMATIC

HOURGLASS

BENTHIC

FOOD HABIT

LIFE HISTORY

ECOLOGY

CONTINENTAL SHELF

ABST Eight species (*Cryptopodia concava*, *Heterocrypta granulata*, *Mesorhoea sexspinosa*, *Parthenope agona*, *P. fraterculus*, *P. serrata*, *P. granulata*, and *Solenolambrus tenellus*) in five genera of parthenopid crabs were captured in a 28-month systematic sampling program at ten stations (6-73 m) along two transects in the Gulf of Mexico on the central western Florida shelf. These collections were supplemented by additional material (including an additional species, *Parthenope pourtalesii*), sampled over a two-year period (1973-75) from the continental shelf along the central eastern Florida coast. Twenty-two species of the family Parthenopidae are known from the western Atlantic; twelve occur in the Gulf of Mexico. Species considered herein are tropical in affinity with only two (*Parthenope pourtalesii* and *Heterocrypta granulata*) occurring farther north than Cape Hatteras. Four additional Floridan species (*Leiolambrus nitridus*, *Solenolambrus decemspinus*, *S. typicus*, and *Tutankhamen cristatipes*) not collected during either survey are also treated. Seven of the thirteen Floridan species have Eastern Pacific analogues. Where equal effort occurred, more specimens in all species were dredged than were trawled, probably because of their semi-burrowing habits. *Parthenope agona* and *P. fraterculus* were more abundant in night samples than in day samples; other species showed little difference in abundance between day and night samples. Presence of ovigerous females in samples indicated that several species (*Parthenope agona*, *P. serrata*, *P. granulata*, *P. fraterculus*, *Heterocrypta granulata*, and *Solenolambrus tenellus*) have extended br

ANNO

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ACC 417
 TYPE
 YEAR 1974
 AUTH GOSSELINK, J.G.; ODUM, E.P.; POPE, R.M.;
 TITL THE VALUE OF THE TIDAL MARSH.

BIBL CENTER FOR WETLAND RESOURCES, LOUISIANA STATE UNIVERSTY, BATON ROUGE, LA. L
 SU-SG-74-03. 3 PP.

KEYW	BIOLOGY	COASTAL ZONE	HABITAT
	MANAGEMENT	MARSH	PRODUCTIVITY
	RESOUREC	SOCIOECONOMIC	

ABST Natural tidal marshes are evaluated in monetary terms. By-product production (fisheries, etc.) on a per-acre basis yields a value of only about \$100 per year even when the whole value of the fishery is inputted to the marsh. More intensive uses, such as oyster aquaculture, which preserve many of the natural functions of the marsh-estuarine ecosystem, have a potential up to \$1000 per acre per year. The potential for waste assimilation is much higher, about \$2500 per acre per year for tertiary treatment. Ummation of the noncompeting uses approaches an ecological life-support value of about \$4000 per acre per year, based on the gross primary productivity (in energy terms) of the natural marsh, using a conversion ratio from energy to dollars based on the ratio of Gross National Product to National Energy Consumption. When these annual social values of \$2500-4000 are income capitalized at 5% interest the estimated total social values are \$50,000-\$80,000 per acre. Some estuaries, such as the Potomac or the Hudson, are now performing waste assimilation work of even greater value but such estuaries are overloaded to the point of degradation. Analysis based on the total value of the life support role of a natural tidal marsh-estuary suggests that a strategy of optimization in land use planning should replace or supplement, reliance on the pricing system which is inadequate for preservation of natural systems that increase in value with the intensity of adjacent development.

ANNO

06/09/1987

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ACC 1089
TYPE
YEAR 1980
AUTH GOSSELINK, J.G.;
TITL TIDAL MARSHES - THE BOUNDARY BETWEEN LAND AND OCEAN.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C., FWLSOB-80\15. 12 PP.

KEYW BIOLOGY	ECOLOGY	LIFE HISTORY
MARSH	NURSERY AREA	NURSERY AREAS

ABST

ANNO

06/09/1987

.....

ACC 582

TYPE

YEAR 1956

AUTH GOULD, H.R.; STEWART, R.H.;

TITL CONTINENTAL TERRACE SEDIMENTS IN THE NORTHEASTERN GULF OF MEXICO.

IN: J.L. HOUGH AND H.W. MENARD (EDS.). FINDING ANCIENT SHORELINES.

BIBL SOCIETY OF ECONOMIC PALEONTOLOGISTS AND MINERALOGISTS. SPECIAL PUBLICATION
3, TULSA, OK.

KEYW PLEISTOCENE
SEDIMENT

CONTINENTAL SHELF
HISTORIC GEOLOGY

GEOLOGY

ABST

ANNO

06/09/1987

.....
ACC 2092

TYPE P

YEAR 1978

AUTH GOULD, G.F.;MOBERG, M.L.;

TITL ANALYSIS OF MARINE SAMPLES FROM THE OUTER CONTINENTAL SHELF OF MISSISSIPPI,
ALABAMA, AND FLORIDA (MAFLA) FOR HIGH MOLECULAR WEIGHT HYDROCARBONS IN BEN
THIC SAMPLES. IN: MAFLA FINAL REPORT (THE MISSISSIPPI, ALABAMA, FLORIDA
OUTER CONTINENTAL SHELF BASELINE ENVIRONMENTAL STUDY. 1977/1978.
VOL. II, CHAPT. 8.

BIBL DAMES AND MOORE, INC. FOR BLM CONTRACT #AA550-CT7-34:494-530.

KEYW HYDROCARBON
DEMERSAL FISH

BENTHIC
EPIFAUNA

SEDIMENT
MAFLA

ABST Analysis of 976 benthic sediments, demersal fish, and macroepifaunal sample
s was conducted for high molecular weight hydrocarbon. Some pooling of sma
ll samples was required. Results appear to be comparable to those reported
for earlier MAFLA studies. Laboratory techniques are described.

ANNO

06/09/1987

.....
ACC 2093

TYPE P

YEAR 1978

AUTH GOULD, G.F.;MOBERG, M.L.;

TITL ANALYSIS OF MARINE SAMPLES FROM THE OUTER CONTINENTAL SHELF OF MISSISSIPPI,
ALABAMA, AND FLORIDA (MAFLA) FOR TRACE METALS IN DEMERSAL FISH AND MACROEP
INFAUNA. IN: MAFLA FINAL REPORT (THE MISSISSIPPI, ALABAMA, FLORIDA OUTER
CONTINENTAL SHELF BASELINE ENVIRONMENTAL STUDY. 1977/1978). VOL II.
CHAPT. 5.

BIBL DAMES AND MOORE, INC. FOR BLM CONTRACT #AA550-CT7-34:406-422.

KEYW TRACE METAL
MAFLA

DEMERSAL FISH

EPIFAUNA

ABST A total of 605 demersal fish and macroepifaunal samples were analyzed for t
race metals. Smaller samples required pooling. Results appear to be compa
rable to those reported for earlier MAFLA studies.

ANNO

06/09/1987

.....
ACC 623
TYPE
YEAR 1970
AUTH GRADY, J.R.;
TITL DISTRIBUTION OF SEDIMENT TYPES NORTHERN GULF OF MEXICO.

BIBL NATIONAL MARINE FISHERIES SERVICE, BIOLOGICAL LABORATORY, GALVESTON, TX. 1
PP.

KEYW CONTINENTAL SHELF CONTINENTAL SLOPE DISTRIBUTION
GEOLOGY SEDIMENT

ABST This is a sediment distribution map of the northern Gulf of Mexico. The map indicates the sediments from the shoreline to depths from 100 to 1000 meters.

ANNO

06/09/1987

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ACC 1094
TYPE
YEAR 1973
AUTH GREEN, F.M.;
TITL NITROGEN FIXATION IN SALT MARSHES OF THE NORTHERN GULF COAST OF FLORIDA.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 57 PP.

KEYW BENTHIC FLORA NITROGEN NUTRIENT
 MARSH

ABST The acetylene reduction method for determination of nitrogen fixation was used to describe nitrogen fixation in salt marshes on the northern Gulf coast of Florida. Three plots on one transect at each of 2 stations were monitored biweekly from January 1971 to February 1972. Irregular measurements were made at 4 other stations.

ANNO

06/09/1987

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ACC 2414
TYPE P
YEAR 1982
AUTH GREGORY, D.R., JR.; LABISKY, R.F.; COMBS, C.L.;
TITL REPRODUCTIVE DYNAMICS OF THE SPINY LOBSTER PAGULIRUS ARGUS IN SOUTH FLORIDA

BIBL TRANS. AM. FISH SOC. 111:575-584.

KEYW MONROE BIOLOGY SPINY LOBSTER
 REPRODUCTION LENGTH

ABST The reproductive biology of the spiny lobster *Pagulirus argus* was studied in five different habitats in the lower Florida Keys between July 1975 and August 1976. A total of 3,235 females were captured in commercial wooden slat traps. The minimum size of reproductive maturity was 70 mm carapace length (CL). Maximum reproductive activity occurred among females in the 80-85 mm size class. Although reproduction occurred from April to September, it was most prevalent in May and June. The number of reproductively active females was greater in Atlantic habitats than at Gulf sites. Legally protected females (<76.2 mm CL) were responsible for only 14% of the annual egg production; females in the 75-85 mm class contributed 48% of the annual egg production. It is concluded that the minimum size limit be increased to 85 mm CL to protect the portion of the lobster population with the greatest reproductive potential.

ANNO

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ACC 4049
TYPE P
YEAR 1980
AUTH GREGORY, D.R., JR.;
TITL REPRODUCTION DYNAMICS OF THE SPINY LOBSTER, PANULIRUS ARGUS (LATRIELLE), IN
SOUTH FLORIDA.

BIBL MASTER'S THESIS. UNIVERSITY OF FLORIDA, GAINESVILLE, FL. 56 P.

KEYW BIOLOGY CRUSTACEA SPINY LOBSTER
RECRUITMENT REPRODUCTION SPAWNING AREA
TAGGING BENTHIC INVERTEBRATE

ABST The reproductive biology of the spiny lobster, *Panulirus argus*, was studied in two Gulf of Mexico habitats (shallows and mid-depth) and three Atlantic Ocean habitats (shallows, patch reef, and deep reef) in the lower Florida Keys during the 19 months, July 1975-August 1976. The minimum size of reproductive maturity, expressed by carapace length (CL), was 70 mm; none of 1,214 females smaller than 70 mm CL was ovigerous, and only 11 (< 1%) possessed spermatophores. Sixty-two percent (2,021) of the 3,235 females sampled were reproductively mature (>70 mm CL). Reproductive activity was greatest among females in the 80-85 mm CL size class; the mean size of 62 ovigerous females was 83.2 mm CL. Reproduction occurred during the months of April-September, but was most prevalent in May and June. Reproduction in the lower Keys was restricted to the Atlantic; none of 792 mature Gulf females was reproductively active whereas 257 (21%) of 1,235 mature Atlantic females were ovigerous or spermatophoric. In the Atlantic, active reproduction was associated with reef substrates; 25% occurred on the Patch Reef and 75% on the Deep Reef. During the reproductive season (April-September), sex ratios were skewed toward females in reef habitats but toward males in nonreef habitats. A fecundity schedule revealed that only 16% of the annual egg production was contributed by legally protected females (CL less than or equal to 75 mm). The most productive size class consisted of females newly recruited to the fishery (75-85 mm CL); these females contributed about half (47%) of the total annual egg production. The reproductive potential of this lo

ANNO

06/09/1987

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ACC 2094
TYPE P
YEAR 1970
AUTH GREINER, G.O.G.;
TITL DISTRIBUTION OF MAJOR BENTHONIC FORAMINIFERAL GROUPS OF THE GULF OF MEXICO
CONTINENTAL SHELF.

BIBL MICROPALAEONTOLOGY 16(1):83-101.

KEYW FORAMINIFERA	TEMPERATURE	SALINITY
DEPTH	CARBONATE	

ABST Results of an earlier study are expanded upon in this study of the distribution of major foraminiferal groups in the Gulf of Mexico. The three major groups of foraminifera; agglutinated, hyaline, and porcelaneous wall types, are compared in their need for the availability of CaCO₃. CaCO₃ availability is dependent on temperature, salinity, and hydrostatic pressure. The three wall types have different methods of obtaining CaCO₃ and are therefore affected differently by environmental variables.

ANNO

06/09/1987

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ACC 2415
TYPE P
YEAR 1974
AUTH GRIFFIN, G.M. ;
TITL CASE HISTORY OF A TYPICAL DREDGE-FILL PROJECT IN THE NORTHERN FLORIDA KEYS,
EFFECTS ON WATER CLARITY, SEDIMENTATION RATES AND BIOTA.

BIBL HARBOR BRANCH FOUND., INC. PUBL. NO. 33.

KEYW MONROE	SUSPENDED	SEDIMENT
SEAGRASS	REEF	TURBIDITY
DREDGING		

ABST A typical "hard rock" dredge-fill project on the Atlantic side of Key Largo was monitored for 390 days in order to document the amount of suspended sediment produced, its distribution and the effects on water clarity and benthos near the dredge. The area of the plume influence was determined to rarely exceed the limits of an area extending 0.3 nautical miles along shore and 0.33 nautical miles offshore, or 0.1 s. n.mi. The value of turbidity dispersals was discussed and it was concluded that they need to be redesigned to eliminate leaks and that proper positioning is crucial. No detectable influence of the dredge on the seagrasses or other inshore biota near the canal was found, nor were any abnormal changes detected in the reef. Compared to hydraulic dredging, "hard rock" dredging was found to have less impact on water clarity, sedimentation rates and biota, largely because the concentration in the plume was lower. Also, the material being dredged was the rather inert Key Largo limestone which is less apt to contain pesticides, toxic metals, or oxygen-demanding organic debris.

ANNO

06/09/1987

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ACC 2095

TYPE P

YEAR 1977

AUTH GRIMM, D.E.; HOPKINS, T.S.;

TITL PRELIMINARY CHARACTERIZATION OF THE OCTOCOROLLIAN AND SCLERACTINIAN DIVERSITY AT THE FLORIDA MIDDLE GROUND.

BIBL PROC. THIRD INTERNAT. CORAL REEF SYMP., MIAMI, FL. MAY 1977. 1:135-142.

KEYW CORAL

ZOOGEOGRAPHY

SCLERACTINIA

OCTOCORALLIA

DIVERSITY

DISTRIBUTION

ABST Transects at 6 sites on the Florida Middle Grounds were sampled in September 1975 and February/March 1976 to determine the species composition and diversity of the coral fauna. Range extensions were recorded for both scleractinian and octocorallian species. Diversity of octocorals was highest at northern stations; whereas scleractinians had the greatest diversity at southern stations. Both groups exhibited a regular zonation pattern despite a high degree of habitat variability. The coral communities of the Florida Middle Grounds are thought to represent pioneer species occurring in a marginally favorable environment.

ANNO

06/09/1987

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ACC 4192

TYPE P

YEAR 1977

AUTH GUINN, V.P.; ET AL.;

TITL NEUTRON ACTIVATION ANALYSIS TRACE-ELEMENT STUDIES IN CONNECTION WITH THE OF
FSHORE DRILLING FOR OIL.

BIBL PROC. INT. CONF. NUCL. METHODS ENVIRON. ENERGY RES., 3RD. J.R. VOGT (ED.).
303-311.

KEYW OFFSHORE DRILLING

POLLUTION

SEDIMENT

ABST

ANNO

06/09/1987

.....
ACC 302

TYPE

YEAR 1976

AUTH GULF SOUTH RESEARCH INSTITUTE;

TITL TRACE METAL ANALYSIS: QUALITY CONTROL FOR MAFLA (MISSISSIPPI, ALABAMA, FLORIDA) 4 AND SOUTH TEXAS 2 INVESTIGATIONS.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-76/5. 204 PP.

KEYW BIOLOGY

ECOLOGY

FISHERY

GEOLOGY

HEAVY METAL

OCEANOGRAPHY

WATER QUALITY

ZOOPLANKTON

TRACE METAL

MAFLA

ABST A comprehensive quality control program, Contract No. 08550-CT5-49, was conducted by Gulf South Research Institute (GSRI) in support of the Mississippi, Alabama, Florida (MAFLA) OCS Monitoring and South Texas OCS Baseline Program for the Bureau of Land Management, Department of the Interior. A total of 241 marine environmental samples including 10 suspended particulates, 31 zooplankton, 19 paint chip samples, 75 sediment and 106 epifauna samples were subjected to quality control trace metal analysis.

ANNO

06/09/1987

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ACC 400

TYPE

YEAR 1981

AUTH GULF OF MEXICO FISHERIES MANAGEMENT COUNCIL;

TITL DRAFT FISHERY MANAGEMENT PLAN ENVIRONMENTAL IMPACT STATEMENT AND REGULATORY
ANALYSIS FOR THE GROUND FISH IN THE GULF OF MEXICO.

BIBL GULF OF MEXICO FISHERIES MANAGEMENT COUNCIL, TAMPA, FL. 39 PP.

KEYW BIOLOGY

MANAGEMENT

FISHERY

FISHERY STATISTICS

SOCIOECONOMIC

ABST

ANNO

06/09/1987

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ACC 410

TYPE

YEAR 1977

AUTH GULF STATES MARINE FISHERIES COMMISSION;

TITL GULF STATES MARINE FISHERIES COMMISSION TWENTY-EIGHTH ANNUAL REPORT 1976-1977 TO THE CONGRESS OF THE UNITED STATES AND TO THE GOVERNORS AND LEGISLATORS OF ALABAMA, FLORIDA, LOUISIANA, MISSISSIPPI AND TEXAS.

BIBL GULF STATES MARINE FISHERIES COMMISSION, OCEAN SPRINGS. MS. 48 PP.

KEYW COASTAL WATER
FISHERY

MANAGEMENT
GEOLOGY

RESOURCE
CONTINENTAL SHELF

ABST

ANNO

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ACC 682
TYPE
YEAR 1981
AUTH GULF OF MEXICO REGIONAL TECHNICAL WORKING GROUP;
TITL GULF OF MEXICO, REGIONAL TRANSPORTATION MANAGEMENT PLAN.

BIBL BUREAU OF LAND MANAGEMENT, GULF OF MEXICO OCS REGIONAL OFFICE, NEW ORLEANS,
LA. 139 PP.

KEYW COASTAL ZONE	GAS	MANAGEMENT
OIL TRANSPORT	OIL	OPERATOINS
CONTINENTAL SHELF		

ABST The Gulf of Mexico RTMP consists of two planning levels due to existing leasing and development conditions. The area of jurisdiction for Florida (eastern Gulf) down to the 26 degree N latitude line is at Level II planning. The four other Gulf states have produced Level III plans. The federal OCS jurisdiction has been evaluated at the third level. The RTMP, therefore, is made up of the integrated individual state and federal plans at the appropriate level of planning. As changes in the region occur due to the leasing schedule, sales, and discoveries, the RTMP will be updated based on the three-level planning system. To be effective, a planning system in the Gulf of Mexico must address the current situation of oil and gas activities and the processes associated with transporting the resources to land. The central and western Gulf is noted as having the most developed infrastructure system for oil and gas production in the world, which includes oil refineries, petrochemical processing plants, offshore supply bases, construction yards for pipelines and platforms and other industry-related facilities. The most intense offshore development is located in the central Gulf, with activity stretching into the western Gulf. In the eastern Gulf, most areas remain largely undeveloped in terms of infrastructure. The existing system of oil and gas related industries extends eastward only to Pascagoula, Mississippi.

ANNO

06/09/1987

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ACC 4050

TYPE P

YEAR 1986

AUTH GULF OF MEXICO FISHERY MGMT. COUNCIL AND S. ATLANTIC FISH. MGMT. COUNCIL;
TITL AMENDMENT NO. 1 TO THE FISHERY MANAGEMENT PLAN FOR SPINY LOBSTER IN THE GULF OF MEXICO AND SOUTH ATLANTIC.

BIBL GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, TAMPA, FL. 103 PP.

KEYW BIOLOGY

SPINY LOBSTER

MANAGEMENT

RECREATIONAL FISHERY

CRUSTACEA

COMMERCIAL FISHERY

ABST The spiny lobster fishery consists of the spiny lobster, *Panulirus argus*, and other incidental species of spiny lobster (spotted spiny lobster, *Panulirus guttatus*, smooth tail lobster, *Panulirus laevicauda*, and the Spanish lobster, *Scyllarides aequinoctialis* and *Scyllarides nodifer*). Previously, only *P. argus* was encompassed by the fishery management plan for spiny lobster in the Gulf of Mexico and South Atlantic. This amendment brings *S. nodifer* into the fishery management plan. The spiny lobster fishery occurs principally in the waters off South Florida, with about 50% of the catch taken from the Fishery Conservation Zone. Spanish lobsters are harvested off west Florida and the Florida panhandle, with the catch deriving almost entirely from shrimp vessels using otter trawls. Objectives of the management plan are: (1) to protect long-run yields and prevent depletion of lobster stocks; (2) to increase yield by weight from the fishery; (3) to reduce user group and gear conflicts in the industry; (4) to acquire the necessary information to manage the fishery; and (5) to promote efficiency in the fishery.

ANNO

ACC 4051

TYPE P

YEAR 1985

AUTH GULF OF MEXICO FISHERY MGMT. COUNCIL AND S. ATLANTIC FISH. MGMT. COUNCIL;
TITL FINAL AMENDMENT I, FISHERY MGMT. PLAN AND ENVIRON. IMPACT STATEMENT FOR COA
STAL MIGRATORY PELAGIC RESOURC. IN THE GULF OF MEXICO & S. ATLANTIC REGION.

BIBL GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, TAMPA, FL. 187 PP.

KEYW BIOLOGY	SOCIOECONOMIC	MANAGEMENT
LANDINGS (POUNDS)	COMMERCIAL FISHERY	PELAGIC FISH
KING MACKEREL	SPANISH MACKEREL	

ABST A 1983 reassessment of the king mackerel stock by fishery scientists developed a maximum sustainable yield for this species at 262. million pounds, well below the 37 million pounds set in the original plan. The researchers also established the existence of two migratory groups, one of which was being overfished to the level where stock was declining. The plan was, therefore, failing to prevent overfishing and to achieve optimum yield as provided by the first National Standard set forth in the Magnuson Act. The Councils, therefore, determined that it is urgent to amend the plan accordingly, to restore stock and achieve a more valid level of optimum yield based on the recent findings. Because stock recovery will be gradual and because changes in fishing effort and fishing patterns cannot be anticipated, a flexible plan is proposed. The amended plan would provide for annual stock assessments for king and Spanish mackerels and provide needed control to restore and maintain the fish populations near MSY.

ANNO

06/09/1987

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ACC 4052

TYPE P

YEAR 1981

AUTH GULF OF MEXICO FISHERY MGMT. COUNCIL AND S. ATLANTIC FISH. MGMT. COUNCIL;
TITL FISHERY MANAGEMENT PLAN, ENVIRONMENTAL IMPACT STATEMENT, AND REGULATORY ANALYSIS FOR SPINY LOBSTER IN THE GULF OF MEXICO AND SOUTH ATLANTIC.

BIBL GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, TAMPA, FL. 149 PP.

KEYW BIOLOGY	CRUSACEA	SPINY LOBSTER
MANAGEMENT	COMMERCIAL FISHERY	RECREATIONAL FISHERY
LANDINGS (POUNDS)	INVERTEBRATE	

ABST This report describes the probable impacts of implementing regulations for the spiny lobster fishery management plan. The spiny lobster fishery consists of the spiny lobster, *Panulirus argus*, and other incidental species of spiny lobster which inhabit coastal waters of and the FCZ of the Gulf of Mexico and the South Atlantic Fishery Management Council areas and which are pursued by commercial and recreational fishermen. The maximum sustainable yield was estimated as 12.7 million pounds annually. Optimum yield was considered to be all lobster more than 3.0 inches carapace length or not less than 5.5 inches tail length harvested by commercial and recreational fishermen given existing technology and prevailing economic conditions. Expected annual harvest for 1981 was 8.0 million pounds.

ANNO

ACC 4053

TYPE P

YEAR 1982

AUTH GULF OF MEXICO FISHERY MGMT. COUNCIL AND S. ATLANTIC FISH. MGMT. COUNCIL;
TITL FISHERY MANAGEMENT PLAN FOR CORAL AND CORAL REEFS OF THE GULF OF MEXICO AND
SOUTH ATLANTIC.

BIBL GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, TAMPA, FL. 225 PP.

KEYW	BIOLOGY	MANAGEMENT	COMMERCIAL FISHERY
	RECREATIONAL FISHERY	CORAL	REEF
	BENTHIC		

ABST The Coral and Coral Reef Fishery of the Gulf of Mexico and south Atlantic is of importance to both recreational and commercial fishermen. This fishery is unique in that its habitat and nonconsumptive value greatly exceed its value as a harvested product. Evaluating the economic impact of proposed regulations in a quantitative manner is not possible and appears unnecessary. First, the unique character of the fishery makes it a crucial, if not major, part of the life cycle of several important species of fish and shellfish; the commercial and recreational value of these species would conservatively exceed \$300 million annually. While there is no question of the habitat value of coral to marine life in general, there is little or no information available to estimate incremental decreases in value as coral may be destroyed gradually. Thus, only gross values and relationships can be used. Second, the Fishery Management Plan (FMP) and associated regulations would be classified as a minor rule under the criteria of Executive Order 12291 and the Interim Guidelines established by the Office of Associate Administrator for Fisheries. The need for federal regulation through a FMP is critical because the traditional federal role of managing coral and coral reefs in the FCZ has been largely abrogated in the fishery conservation zone (FCZ) except as it applies to oil and gas exploration and development. Uncontrolled harvesting and subsequent damage to coral and coral reefs will threaten several major fish and shellfish fisheries as well as the nonsumptive value derived from coral. The management measures proposed by the Councils

ANNO

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ACC 126
 TYPE
 YEAR 1979
 AUTH GUNTER, G.;
 TITL THE ANNUAL FLOWS OF THE MISSISSIPPI RIVER.

BIBL GULF RES. REP. 6(3):283-290.

KEYW CURRENTS HYDROGRAPHY PHYSICAL PROCESS
 RIVER DISCHARGE

ABST The Mississippi River drains two thirds of the lower United States plus 13,000 square miles of Canada. When North America was being colonized by Europeans, the river overflowed its banks about once every 3 years and spread on to the floodplain, which today covers 34,600 square miles of the valley. A natural levee formed alongside the river where the silt was dropped when water left the channel; the levee now slopes away from the river at about 7 feet per mile. This high ground was settled first by the white man at New Orleans in 1717. The spring floods barely topped the natural levee and the original town was protected by a ring levee 3 feet high. As more overflow areas were cut off from the river, the levees increased in height to about 40 feet. The hydraulics of the river became better and today more water and silt flow out to sea. About three fourths of the floodplain is closed off from the river, but in 1882 and 1927, the river took that land back, and in 1973 almost 60% of the 22-million-acre area was flooded. Nevertheless, there have been no levee breaks since the Corps of Engineers took over flood control in 1928. The mean flow of the river since 1900 has been 646,000 cubic feet per second (cfs) moment to moment. The mode, median, quartiles and deciles of annual flows are given, and the measurements of dispersion, the standard deviation and coefficient of variation are given. The Atchafalaya River distributary has increased considerably at the expense of the Mississippi River since 1858. During the flood year of 1973, the Atchafalaya carried 37% of the total flow. It is estimated that unless it is brought under control

ANNO The highest for the Atchafalaya was 781,000 cfs at Simmesport on May 12, 1973; the highest for the Mississippi was at Tarbert Landing on February 19, 1937, at 1,977,000 cfs. Subjectively described floods of 1782, 1828, and 1882 tie in with 1927 and 1973 as 50-year floods. The 1927 and 1973 floods were remarkably similar; the former was the larger. The largest known flow of the river is only 25% less than the maximum which meteorologists say could be generated. Presumably such a flood could be handled without catastrophe

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ACC 127
TYPE
YEAR 1979
AUTH GUNTER, G.; LYLES, C.H.;
TITL LOCALIZED PLANKTON BLOOMS AND JUBILEES ON THE GULF COAST.

BIBL GULF RES. REP. 6(3):297-300.

KEYW	BIOLOGY	FISH KILL	PLANKTON BLOOM
	METEOROLOGY	PRECIPITATIOAN	NUTRIENT
	RED TIDE		

ABST The point of these remarks is to call the reader's attention to the fact that there are localized plankton blooms taking place at many locations and many times up and down the Gulf coast. They have also been reported on the Atlantic coast. They appear to be responsible for many localized cases of fish kills. Their onset is often characterized as following rainy weather and a few days of calm. It thus appears that some land component or components are washed down by the rains into waters near shore. Whether or not these are the usual fertilizer salts or some trace element that acts as a chelating agent is not known. Such phenomena seem to occur more frequently than they did in the past probably because of increased nutrients flowing into our salt waters in recent years due to various activities of man. Several types of unicellular organisms seem to be involved. Two of them are known, Chaetoceros and Gonyaulax. No human ailment has been reported from the eating of crustaceans or fish caught during a jubilee. However, it is now well recognized that a toxic substance is produced in blooms of naked dinoflagellates.

ANNO

06/09/1987

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ACC 724

TYPE

YEAR 1967

AUTH GUNTER, G.;

TITL SOME RELATIONSHIP OF ESTUARIES TO THE FISHERIES OF THE GULF OF MEXICO.

IN: G.H. LAUFF (ED.) ESTUARIES:621-638.

BIBL AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, PUBLICATION NO. 83, WASHINGTON, D.C.

KEYW BIOLOGY

COMMERCIAL FISHERY ESTUARY

FISHERY

ABST

ANNO

06/09/1987

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ACC 1088

TYPE

YEAR 1960

AUTH GUNTER, G.;CHRISTMAS, J.Y.;

TITL A REVIEW OF LITERATURE ON MENHADEN WITH SPECIAL REFERENCE TO THE GULF MENHADEN, BREVOORTIA PATRONIS GOODE.

BIBL U.S. FISH AND WILDLIFE SERVICE, SPEC. SCI. REP. FISH. 363. 31 PP.

KEYW BIOLOGY
FISH

COMMERCIAL FISHERY
FISHERY

ECOLOGY
LIFE HISTORY

ABST

ANNO

06/09/1987

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ACC 2096

TYPE P

YEAR 1948

AUTH GUNTER, G.; WILLAMS, R.H.; DAVIS, C.C.; SMITH, F.G.W.;

TITL CATASTROPHIC MASS MORTALITY OF MARINE ANIMALS AND COINCIDENT PHYTOPLANKTON
BLOOM ON THE WEST COAST OF FLORIDA, NOVEMBER 1946 TO MAY 1947.

BIBL ECOL. MONOGR. 18.

KEYW PHYTOPLANKTON
DO

NUTRIENT
PLANKTON BLOOM

METEROLOGICAL
RED TIDE

ABST The effects of phytoplankton blooms on marine organisms were observed between November 1946 and August 1947 on the southern Florida Gulf Coast. In laboratory and field experiments, *Gyrodinium aureolum* was specifically lethal to marine organisms when it was present in large numbers. An increased supply of nutrient salts caused by meteorological disturbances was suggested to have led to the plankton bloom.

ANNO

06/09/1987

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ACC 2339
TYPE P
YEAR 1965
AUTH GUNTER, T.J.;HALL, G.E.;
TITL A BIOLOGICAL INVESTIGATION OF THE CALOOSAHATCHEE ESTUARY OF FLORIDA.

BIBL GULF RES. REPT. 2(1):72.

KEYW FISH	INVERTEBRATE	TEMPERATURE
SALINITY	BLUE CRAB	ESTUARY
RIVER DISCHARGE		

ABST Collections were made at various regular stations from Beautiful Isle to the Sanibel Island outer beach over the salinity range from fresh water to sea water. The numbers, species and sizes of fishes captured in seines and in trawls within the Caloosahatchee Estuary proper and in the outside waters were presented. In general, the invertebrate population did not change greatly within the estuary with high and low inflows of fresh water. Outside the estuary the invertebrate populations declined with high discharge.

ANNO

06/09/1987

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ACC 2340
TYPE P
YEAR 1947
AUTH GUNTER, G.; SMITH, F.G.; WILLIAMS, R.H.;
TITL MASS MORTALITY OF MARINE ANIMALS ON THE LOWEST WEST COAST OF FLORIDA.

BIBL SCIENCE 105(2723).

KEYW MORTALITY	FISH	TURTLE
CRAB	SHRIMP	TEMPERATURE
SALINITY	DO	RED TIDE
PLANKTON BLOOM	WATER QUALITY	

ABST The effects of *Gymnodinium* sp. outbreak between the Dry Tortugas and Boca Grande, Florida, during November 1946 to January 1947 were briefly documented. Mass mortality of fish, turtles, oysters, clams, crabs, shrimp, barnacles and coquinas were reported. The distribution and abundance of dead animals were estimated. Water quality parameters and plankton composition were monitored in certain areas in an attempt to identify the cause of the mass mortalities.

ANNO

06/09/1987

.....
ACC 4186

TYPE P

YEAR 1981

AUTH GUSEINOV, T.I.;

TITL STUDY OF THE OXIDATIVE NEUTRALIZATION OF DRILLING MUD.

BIBL AZERB. NEFT. KHOZ. (6):35-38.

KEYW DRILLING MUD

POLLUTION

OFFSHORE DRILLING

ABST

ANNO

06/10/1987

.....
ACC 21

TYPE

YEAR 1979

AUTH HACKNEY, C.T.; BISHOP, T.D.;

TITL THE EFFECT OF HURRICANE BOB (JULY 11, 1979) ON THE ST. LOUIS BAY TIDAL MARSHES.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-79-015.
9 PP.

KEYW DETRITUS

HURRICANE

PHYSICAL PROCESS

STORM SURGE

WATER LEVEL

REMOTE SENSING

AERIAL SURVEY

ABST The effect of a low level hurricane (Bob) on the transport and relocation of marsh debris (dead plant material) was evaluated. Aerial photographs and ground truth data indicated that debris (wrack) was distributed on the marsh along areas of higher vegetation. The mean density of the resultant wrack was 2.19 kg/m². Approximately 226 x 10³ kg of unattached dead plant material was removed from the marsh and 7.7 x 10³ redeposited as wrack. Little or no standing dead plant material was removed. Thus, 218 x 10³ kg of dead plant material was removed from the 96 ha study area and transported from the marsh system.

ANNO

06/10/1987

.....
ACC 420

TYPE

YEAR 1982

AUTH HACKNEY, C.T.; DE LA CRUZ, A.A.;

TITL EFFECTS OF FIRE ON BRACKISH MARSH COMMUNITIES: MANAGEMENT IMPLICATIONS.

BIBL WETLANDS 1:75-86.

KEYW BIOLOGY

LIFE CYCLE

PRODUCTIVITY

ECOLOGY

MANAGEMENT

RESOURCE

ENERGY FLUX

MARSH

ABST

ANNO

06/10/1987

.....
ACC 2019
TYPE P
YEAR 1975
AUTH HALUSKY, J.G.;
TITL LOCOMOTORY ACTIVITY RHYTHMS IN BLUE CRABS, CALLINECTES SAPIDUS, (RATHBUN).

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL. 126 P.

KEYW BLUE CRAB BEHAVIOR LIGHT

ABST The locomotory rhythm of small groups and individual blue crabs, *Callinectes sapidus*, was observed in the field and in various laboratory conditions. Crabs exhibited a diurnal-bimodal periodicity. They became active shortly after sunrise, decreased activity during mid afternoon and again increased activity just before sunset. After sunset and during the hours of darkness, they remained inactive. Much individual variation was found and is discussed.

ANNO

06/10/1987

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ACC 2097

TYPE P

YEAR 1975

AUTH HANLON, R.;VOSS, G.;

TITL GUIDE TO SEAGRASSES OF FLORIDA, THE GULF OF MEXICO AND THE CARIBBEAN REGION

BIBL SEA GRANT FIELD GUIDE SER. NO. 4. 30 P.

KEYW SEAGRASS

COMMERCIAL FISHERY

EROSION

ABST A field guide to the seagrasses of Florida, the Gulf of Mexico, and the Caribbean region was presented. Included was a key to the grasses, and descriptions of the following species: *Thalassia testudinum*, *Halodule wrightii*, *Syringodium filiforme*, *Ruppia maritima*, *Halophila baillonis*, *Halophila engelmannii*, *Zostera marina*. The importance of the grasses to the welfare of the commercial fisheries was discussed as was their role in the prevention of erosion.

ANNO

06/10/1987

.....
ACC 1098
TYPE
YEAR 1972
AUTH HANNAH, R.P.;
TITL PRIMARY PRODUCTIVITY AND CERTAIN LIMITING FACTORS IN A BAYOU ESTUARY.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 53 PP.

KEYW ALKALINITY	AMMONIA	NITRATE
ORTHOPHOSPHATE	PHOTOSYNTHESIS	PHYTOPLANKTON
SALINITY	SECCHI DISC	TEMPERATURE
ESTUARY	NUTRIENT	

ABST Primary productivity and its related limiting factors was studied at 6 stations in Bayou Texar, Pensacola Bay, Florida for one year beginning in April, 1971. Biweekly monitoring and 3 diurnal studies were supplimented by in-situ and laboratory experiments with nutrients in order to describe the factors that effect primary production.

ANNO

06/10/1987

.....
ACC 442

TYPE

YEAR 1969

AUTH HANSEN, D.J.;

TITL FOOD, GROWTH, MIGRATION, REPRODUCTION, AND ABUNDANCE OF LAGODON RHOMBOIDES
AND MICROPOGON UNDULATUS NEAR PENSACOLA, FLORIDA.

BIBL FISH. BULL. 68(1):135-146.

KEYW BIOLOGY

FEEDING HABIT

MIGRATION

COASTAL WATER

FISH

ABUNDANCE

ECOLOGY

GROWTH

ABST

ANNO

.....
ACC 51
TYPE
YEAR 1982
AUTH HANSON, R.B.;
TITL INFLUENCE OF THE MISSISSIPPI RIVER ON THE SPATIAL DISTRIBUTION OF MICROHETE
ROTROPHIC ACTIVITY IN THE GULF OF MEXICO.

BIBL CONTRIB. MAR. SCI. 25:181-198.

KEYW BIOLOGY CARBON-14 CONTINENTAL SHELF
SALINITY TEMPERATURE ORGANIC CARBON
RIVER DISCHARGE

ABST Spatial distribution of microheterotrophic activity in the water column of the Mississippi Delta Bight and the Gulf of Mexico was investigated in April and May 1977. Microheterotrophic activity was determined from the uptake of labeled [C14] glucose and the concentration of reactive carbohydrates. Mississippi River water was characterized by particulate organic carbon (POC) concentration and hydrographic data. Microheterotrophic activity decreased with distance offshore and with increasing depth of the water column in the Mississippi Delta Bight. Highest activity was in waters with low salinities and high POC concentrations. Where the salinities were characteristic of open Gulf of Mexico waters, microheterotrophic activities were typically low. Waters with warmest temperatures did not always possess the highest microheterotrophic activity. In surface waters of the Gulf of Mexico, activity was lower than in the Bight and activity decreased with increasing depth. Turnover times of carbohydrates were inversely proportional to the rate of microheterotrophic activity. Reactive carbohydrates did not show any gradients with either distance from shore or depth of the water column. Respiration ([C14] CO₂) of the labeled glucose was highest in surface waters and decreased with distance from shore. The results suggest that the Mississippi River greatly influences the spatial distribution of microheterotrophic activity in the Mississippi Delta Bight but not in the Gulf of Mexico.

ANNO

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ACC 2189
TYPE P
YEAR 1981
AUTH HANSON, R.B.;TENORE, K.R.;ET AL.;
TITL BENTHIC ENRICHMENT IN THE GEORGIA BIGHT RELATED TO GULF STREAM INTRUSIONS AND ESTUARINE OUTWELLING.

BIBL J. MAR. RES. 39(3):417-422.

KEYW	CONTINENTAL SHELF	DISTRIBUTION	BENTHIC
	BIOMASS	MEIOFAUNA	NUTRIENT
	INTRUSION	SEDIMENT	ORGANIC CARBON
	METABOLISM	GRAIN SIZE	ESTUARY

ABST Twelve stations on the continental shelf of the Georgia Bight were sampled by box core to determine the distribution of benthic biomass (microbiota, meiofauna, and macrofauna), which is believed to be influenced by nutrient inputs from intrusions of deep Gulf Stream waters at the shelf break. Microbiota biomass was lower in the mid shelf than in the inner and outer shelf. Along the shelf break microbiota biomass increased southward toward an area of frequent Gulf Stream intrusions off Florida. Maximum meiofaunal biomass occurred in the mid shelf area off Georgia which is sporadically subjected to deep water intrusions. Macrofaunal biomass reached its maximum off Florida. Relationships between microbial, meiofaunal and macrofaunal biomass distribution are cited. Values for sediment granulometry, organic carbon, nitrogen content, benthic surface metabolism, and microbial activity are summarized in addition to faunal biomass and density. It is concluded that the mid shelf benthos is generally impoverished due to sporadic and patchy nutrient inputs, while the shelf break and inner shelf benthos are enriched by nutrients from deep Gulf Stream intrusions and estuarine outwelling, respectively.

ANNO

06/10/1987

.....
ACC 791
TYPE
YEAR 1977
AUTH HARPER, D.D.;
TITL DISTRIBUTION AND ABUNDANCE OF MACROBENTHIC AND MEIOBENTHIC ORGANISMS.

BIBL IN: E.P. KLIMA (ED.). ENVIRONMENTAL ASSESSMENT OF AN ACTIVE OIL FIELD
IN THE NORTHWESTERN GULF OF MEXICO, 1976/1977. NATIONAL MARINE FISHERIES.
KEYW BENTHIC COMMUNITY BENTHIC FAUNA BIOLOGY
COMMUNITY STRUCTURE ECOLOGY MEIOFAUNA
SPECIES COMPOSITION ABUNDANCE

ABST

ANNO

06/10/1987

.....
ACC 421
TYPE
YEAR 1983
AUTH HARRISON, E.J.;HEATON, T.C.;
TITL LITERATURE REVIEW, DATA SET IDENTIFICATION AND COMPILATION OF DATA OF THE G
ROUND FISH FISHERY IN THE SOUTH ATLANTIC AND GULF OF MEXICO.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-82-025.

KEYW	BIOLOGY	FISHERY	INFAUNA
	DIVERSITY	ABUNDANCE	DISTRIBUTION

ABST In order to understand and describe dynamic changes in macroinfaunal assemblages within this area of Mobile Bay, a long-term (18 month) benthic survey was conducted. The specific objectives of the present study were: (1) to identify the macroinvertebrates which occur subtidally at selected sites near the mouth of Mobile Bay; (2) to delineate and describe communities on the basis of species composition, density, and diversity; (3) to describe the spatial distributions and seasonal patterns of faunal assemblages; and (4) to relate faunal patterns (spatially and temporally) to selected environmental and physio-chemical changes in the benthos. Little published information exists on the benthic invertebrate fauna in Alabama's inshore waters, especially the lower portion of Mobile Bay. A review of data available through 1973, along with a generalized characterization and distribution of benthic macrofaunal assemblages found in the Bay (according to Parker, 1960, mentioned earlier), was prepared by Coastal Ecosystems Management, Inc. (1974), as an environmental impact assessment. The proceedings of the "Symposium on the Natural Resources of the Mobile Bay Estuary, Alabama," provided a synopsis of these and other benthic data through 1979.

ANNO

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ACC 83
 TYPE
 YEAR 1978
 AUTH HART, W.E.;MURRAY, S.P.;
 TITL ENERGY BALANCE AND WIND EFFECTS IN A SHALLOW SOUND.

BIBL J. GEOPHYS. RES. 83(C8):4097-4106.

KEYW HYDROGRAPHY	MATHEMATICAL MODEL	METEOROLOGY
PHYSICAL PROCESS	WIND FORCE	TIDE
WIND	CURRENTS	

ABST Tidal energetics and wind effects in an extensive (3000 km²) shallow (3.5m) sound with two widely separated entrances were studied numerically with a two-dimentional vertically averaged model. A comparison of current predictions with observation from 15 current meter stations under differing tidal regimes proved the reliability of the model. Evaluation of the instantaneous energy balance equation showed the change in energy content to be nearly balanced by input energy flux, frictional energy dissipation being of secondary importance. In contrast to the equipartition of energy in classical long waves, there is on the average eight times more potential energy than kinetic energy. Input energy flow shows preferential pathways; the wide northern entrance mainly shows energy gain to the Sound, the southern entrance shows equal amounts of gain and loss, while small cuts through the barrier island chain serve mainly as conduits for energy loss. When real tidal input is used, the energy balance time-averaged over a diurnal tidal cycle is not in a steady state, and frictional dissipation is the dominant term. Experiments showed that with winds in the 8- to 9-m/s range, extensive setup can occur (20 cm), strongly dependent on wind direction. Increased speeds through the passages can significantly reduce the residence time in the Sound. Relaxation time of the wind perturbations is only about 3 hours.

ANNO

06/10/1987

.....
ACC 314
TYPE
YEAR 1972
AUTH HASTINGS, R.W.;
TITL BIOLOGY OF THE PYGMY SEA BASS, SERRANICULUS PUMILIO (PISCES:SERRANIDAE).

BIBL FISH. BULL. 7(1):235-242.

KEYW BIOLOGY	COASTAL WATER	FEEDING HABIT
FISH	LIFE HISTORY	REPRODUCTION

ABST During the period from 1968 to 1971, numerous specimens of *Serraniculus pumilio*, were collected in shallow waters of the northern Gulf of Mexico. This paper presents biological data accumulated from these and other specimens in the fish collection of Florida State University and from scattered literature references regarding the species. The range of *S. pumilio* extends from North Carolina along the continental margin of the western Atlantic Ocean to Guyana, but it apparently does not occur in the West Indies. It has been collected at depths from 1 to 117 m., usually over sand or shell bottoms near coral or rock reefs or accumulations of mollusk shells. Individuals move about considerably, although they spend much time resting on the bottom. *S. pumilio* is a synchronous hermaphrodite, but pairs mate to exchange gametes and self-fertilization probably never occurs. Spawning occurs between March and August or September in the northern Gulf of Mexico.

ANNO

06/10/1987

.....
ACC 599

TYPE

YEAR 1982

AUTH HAVRAN, K.J.;WIESE, J.D.;COLLINS, K.M.;KURZ, F.N.;

TITL GULF OF MEXICO SUMMARY REPORT. OUTER CONTINENTAL SHELF OIL AND GAS INFORMATION PROGRAM.

BIBL U.S. GEOLOGICAL SURVEY, OPEN-FILE REPORT 82-242.

KEYW OIL CONTINENTAL SHELF RESOURCE
SOCIOECONOMIC

ABST

ANNO

06/10/1987

.....
ACC 128
TYPE
YEAR 1978
AUTH HAWES, S.R.;PERRY, H.M.;
TITL EFFECTS OF 1973 FLOODWATERS ON PLANKTON POPULATIONS IN LOUISIANA AND MISSISSIPPI.

BIBL GULF RES. REP. 6(2):109-124.

KEYW BIOLOGY COASTAL ZONE PLANKTON
 POPULATION RIVER DISCHARGE ZOOPLANKTON

ABST Studies to assess the impact of floodwater diversion on plankton populations in coastal waters of Mississippi and Louisiana were conducted from April 23, 1973 through July 13, 1973. Fixed stations in Lake Pontchartrain, Lake Borgne and western Mississippi Sound were sampled once in April, twice in May and June, and once in July. Stations in Terrebonne Parish, Louisiana were visited once in May, June and July. Data are presented on changes in the species composition of zooplankton subsequent to the opening of the Bonnet Carre and Morganza floodways. The hydrographic conditions at the time of sampling are discussed.

ANNO

06/10/1987

.....
ACC 373
TYPE
YEAR 1970
AUTH HEALD, E.J.;
TITL FISHERY RESOURCE ATLAS II. WEST COAST OF FLORIDA TO TEXAS.

BIBL UNIVERSITY OF MIAMI SEA GRANT PROGRAM, MIAMI, FL. SEA GRANT TECHNICAL BULLE
TIN 4. 174 PP.

KEYW	BIOLOGY	COMMERCIAL FISHERY	FISH STOCK
	RESOURCE	FISHING GROUND	STATISTICS
	FISH	DISTRIBUTION	

ABST

ANNO

06/10/1987

.....
ACC 2416

TYPE P

YEAR 1970

AUTH HEALD, E.J.;

TITL THE EVERGLADES ESTUARY: AN EXAMPLE OF SERIOUSLY REDUCED INFLOW OF FRESH WATER.
ER.

BIBL TRANS. AM. FISH. SOC. 99(4):847-848.

KEYW MONROE
ESTUARY

SALINITY
HYDROLOGY

COASTAL
SEAGRASS

ABST A description of reduced freshwater flow to the estuarine regions of the Everglades National Park caused by drainage and irrigation schemes in the central portion of the state was presented. The net result of the freshwater reduction was a lowering of the water table by as much as 6 feet, a gradual landward intrusion of saltwater, increased salinities in the estuarine bays and lagoons, and a reduction in the capacity of the system to withstand stresses of normal drought. AT these extremely high salinities, the dominant producer of the bay, *Thalassia testudinum* is severely limited.

ANNO

06/10/1987

.....
ACC 4323

TYPE P

YEAR 1979

AUTH HEBERT, P.J.;TAYLOR, G.;

TITL EVERYTHING YOU ALWAYS WANTED TO KNOW ABOUT HURRICANES, PT. 2.

BIBL WEATHERWISE, WASH, D.C. 32(3):100-107.

KEYW HURRICANE

HURRICANE DAMAGE

ABST This is the second part of a two-part series discussing hurricanes during the 20th century. In Part 1, the 129 direct hits by hurricanes to Gulf and Atlantic coast states are analyzed. The Galveston Hurricane of 1900 is the deadliest hurricane on record, accounting for over 6000 deaths. The most intense hurricane to strike the U.S. occurred in 1935, when a storm reading 26.35 barometric in. hit the Florida Keys. The costliest storm to date is hurricane "Agnes," which caused over \$2,100,000,000 worth of damage to Florida and the northeastern U.S.

ANNO

06/10/1987

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ACC 2234

TYPE P

YEAR 1976

AUTH HECK, K.L., JR.;

TITL COMMUNITY STRUCTURE AND THE EFFECTS OF POLLUTION IN SEAGRASS MEADOWS AND ADJACENT HABITATS.

BIBL MAR. BIOL. 35(4):345-357.

KEYW COMMUNITY
ABUNDANCE
SALINITY

POLLUTION
STRESS
TURBIDITY

SEAGRASS
TEMPERATURE

ABST Two areas with large differences in abundance and dominance relationships, related to the presence of pulp-mill effluents, were studied. Several commonly used indicators of pollution stress were tested in these areas and were determined to be ineffective in differentiating between the two.

ANNO

06/10/1987

.....
ACC 790
TYPE
YEAR 1953
AUTH HEDGPETH, J.W.;
TITL AN INTRODUCTION TO THE ZOOGRAPHY OF THE NORTHERN GULF OF MEXICO WITH REFERENCE TO THE INVERTEBRATE FAUNA.

BIBL PUBL. INST. MAR. SCI., UNIV. TEX. 3(1):107-224.

KEYW BENTHIC COMMUNITY BENTHIC FAUNA BIOLOGY
 ECOLOGY SPECIES COMPOSITION ZOOGEOGRAPHY
 INVERTEBRATE

ABST This estuarine and neritic waters of the northern Gulf of Mexico, especially along the coasts of Texas and Louisiana, are characterized by broad ranges of environmental factors, providing conditions favorable to temperate organisms in winter and tropical organisms in summer. The fauna is a mixture of temperate Atlantic and tropical Caribbean elements, with a very low endemic component. The distribution of many of the Atlantic species occurring in the northern Gulf is characteristically disjunct, they being absent from southern Florida or represented there by stunted individuals or reduced populations. Many of these species were apparently continuous in distribution across northern Florida during high stands of the sea in late interglacial periods of the Pleistocene. The small number of endemic species-about 10% in most invertebrate groups- may be a reflection of the environmental extremes which enable the development of large populations of wide-ranging adaptable species at the expense of the development of indigenous forms. Similar conditions apparently prevailed well back into the Tertiary, and the evidence of the Cretaceous suggests that the region now bounded by the Gulf Coastal Plain has been in an area of transition between northern and southern environments since that time. The pronounced range of environmental factors has many effects on the communities of the region, and fluctuations in populations are pronounced. Populations in bay waters in particular undergo wide variations as a result of killing cold, high salinities during droughts, and excess drainage of fresh water during floods. Both droughts and killing c

ANNO

06/10/1987

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ACC 4298

TYPE P

YEAR 1976

AUTH HEDGES, J.I.; PARKER, P.L.;

TITL LAND-DERIVED ORGANIC MATER IN SURFACE SEDIMENTS FROM THE GULF OF MEXICO.

BIBL GEOCHIM. COSMOCHIM. ACTA (OXFORD) 40(9):1019-1029.

KEYW SEDIMENT

GEOCHEMISTRY

CONTINENTAL SHELF

ORGANIC CARBON

ABST

ANNO

06/10/1987

.....
ACC 2098

TYPE P

YEAR 1981

AUTH HEFFERNAN, J.J.; HOPKINS, T.L.;

TITL VERTICAL DISTRIBUTION AND FEEDING OF THE SHRIMP GENERA GENNADAS AND BENTHEO
GENNENA (DECAPODA: PENAEIDEA) IN THE EASTERN GULF OF MEXICO.

BIBL J. CRUST. BIOL. 1(14):461-473.

KEYW DISTRIBUTION
MIGRATION

SHRIMP
BEHAVIOR

DEPTH
FEEDING HABIT

ABST Two hundred five trawl collections of 2 shrimp genera were made over 3 depth zones in the eastern Gulf of Mexico. Five species of Gennadas were found to migrate daily, with the majority of the population concentrating at 650-850 m in the day and 150-400 m at night. Bentheogennena intermedia inhabits depths below 900 m. The most abundant species is G. valens, comprising 63% of the Gennadas catch. Stomach contents analysis showed all 6 species to have similar diets of small (1-5 mm) plankton, primarily copepods. Structural adaptations for capture of prey items are discussed and evidence for temporal-spatial resource partitioning between species is evaluated.

ANNO

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ACC 2417
TYPE P
YEAR 1975
AUTH HEIN, F.J.;RISK, M.J.;
TITL BIOEROSION OF CORAL HEADS: INNER PATCH REEFS, FLORIDA REEF TRACT.

BIBL BULL. MAR. SCI. 25(1):133-138.

KEYW MONROE	CORAL	REEF
SPONGE	POLYCHAETE	WAVE
EROSION		

ABST Bioerosion of 6 species of massive reef corals from Hens and Chicken Reef, southwest to Tavernier, Florida, was examined by x-ray radiography. Three groups of boring organisms were identified from 8 coral heads: boring sponges, spionid polychaetes, and mytilid bivalves. Sponges and spionids were responsible for reworking from 7.1% to 68.9% of the skeleton volume. Bioerosion was concentrated at the base and around the periphery of the coral heads, decreasing their ability to withstand wave shock. Results were compared with those of other bioerosion studies of coral. Calculated annual rates of bioerosion exceeded estimated rates of skeletogenesis. Sediment production by mytilid bivalves and boring sponges equalled 15% of the volume of the primary skeletal framework.

ANNO

06/10/1987

.....
ACC 2418
TYPE P
YEAR 1971
AUTH HENRIX, G.Y.;
TITL A SYSTEMATIC STUDY OF THE GENUS ALPHEUS (CRUSTACEA: DECAPODA: ALPHEIDAE) I
N SOUTH FLORIDA.

BIBL PH.D. DISSERTATION. UNIVERSITY OF MIAMI, MIAMI, FL.

KEYW MONROE CRUSTACEA

ABST An historical resume of species of Alpheus reported from the western Atlantic and a survey of the literature on the family Alpheidae were presented. The family Alpheidae and the genus Alpheus were diagnosed and the systematic relationship to other families and genera were discussed. A key to the species of Alpheus found in the western Atlantic was also presented. Twelve species of Alpheus including one new species were described in detail and illustrated. Five reports of species represented range extensions from the Caribbean.

ANNO

06/10/1987

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ACC 443

TYPE

YEAR 1978

AUTH HENWOOD, T.A.;JOHNSON, P.;HEARD, R.W.;

TITL FEEDING HABITS AND FOOD OF THE LONGSPINED PORGY, STENOTOMUS CAPRINUS BEAN.

BIBL NORTHEAST GULF SCI. 2(2):133-137.

KEYW BIOLOGY
FISH

ECOLOGY
DEMERSAL FISH

FEEDING HABIT
BEHAVIOR

ABST The longspined porgy, *Stenotomus caprinus* Bean, is an abundant species in the 40 to 100 meter depth range over much of the northern and western Gulf of Mexico. Gunter & Knapp (1951), Siebenaler (1952), Hildebrand (1954), Caldwell (1955), Roithmayr (1965), Moore et al. (1970), Perry (1970), Franks et al. (1972) and Chittenden & McEachran (1976) have documented the occurrence of this species in the 20 to 120 meter range. Despite ample evidence that the porgy is a major member of the offshore demersal fish population, there have been no published reports on the feeding behavior or food of this fish. This study was undertaken in the hopes of characterizing major food items and feeding patterns within the species.

ANNO

06/10/1987

.....
ACC 809
TYPE
YEAR 1978
AUTH HENWOOD, T.A.;
TITL LIFE HISTORY OF THE LONG SPINED PORGY, STENOTOMUS CAPRINUS.

BIBL MASTER'S THESIS. UNIVERSITY OF SOUTH ALABAMA, MOBILE, AL. 65 PP.

KEYW DEMERSAL FISH FISH LIFE HISTORY

ABST Specimens of *Stenotomus caprinus*, the long spined porgy, were captured between 1972 and 1976. Distribution, reproduction, feeding and growth patterns for the species were examined.

ANNO

06/10/1987

.....
ACC 2341
TYPE P
YEAR 1977
AUTH HERWITZ, S.R.;
TITL ELEMENTS OF THE CAYO-COSTA ISLAND ECOSYSTEM, LEE COUNTY, FLORIDA.

BIBL IN: PROC. OF THE FOURTH ANNU. CONF. ON THE RESTORATION OF COAST. VEGETATION
IN FLORIDA. P. 152-165.

KEYW LEE ECOSYSTEM FLORA
 REMOTE SENSING AERIAL SURVEY

ABST An aerial photographic study of vegetation patterns on Cayo-Costa Island, Charlotte Harbor, Florida, recognized 12 habitats on the basis of dominant plant associations. Eight habitats were found to represent stages in the two patterns of succession occurring on the island. Extensive ground truthing revealed 309 species of vascular plants: 176 were herbs (58%); 64 shrubs (21%); 34 trees (11%); 20 vines (6%); and 12 epiphytes (4%).

ANNO

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ACC 2419
TYPE P
YEAR 1954
AUTH HESS, W.E.;
TITL AN ECOLOGICAL STUDY OF SOME FOULING ORGANISMS IN THE KEY WEST AREA.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL.

KEYW MONROE	FOULING	SUBSTRATE
SEASONAL	BIOLOGY	HYDROGRAPHY
TEMPERATURE	SALINITY	DO
CURRENTS	TURBIDITY	ARTIFICIAL HABITAT

ABST An ecological study of some fouling organisms attached to cement sea walls, ship hulls, wooden pilings and glass panels was conducted in the Key West area. Similar species were found on the various substrates, but the piling s and sea wall had a large intertidal fouling biota not found on the continuously submerged panels and ship hulls. The relationship of the major fouling organisms found on the glass panels to the hydrographic conditions was discussed and the seasonal variations in conditions appeared to be the most important relationship between biology and hydrography. It was deduced from comparisons of the fouling at stations around the U.S. that slowly changing ecological conditions are conducive to attachment by many different species in large quantities.

ANNO

06/10/1987

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ACC 673

TYPE

YEAR 1984

AUTH HEWITT, J.E.; BROOKE, J.P.; KNIPMEYER, J.H.;

TITL ESTIMATED OIL AND GAS RESERVES: GULF OF MEXICO OUTER CONTINENTAL SHELF AND CONTINENTAL SLOPE.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO REGIONAL OFFICE, METAIRIE, LA.
21 PP.

KEYW CONTINENTAL SLOPE	GAS	GEOLOGY
OIL	OPERATIONS	CONTINENTAL SHELF
RESOURCE	SOCIOECONOMIC	

ABST Remaining recoverable reserves of oil and gas in the Gulf of Mexico Outer Continental Shelf and Continental Slope have been estimated to be about 3.41 billion barrels of oil and 43.7 trillion cubic feet of gas, as of December 31, 1983. These reserves are recoverable from 505 studied fields under the Federal submerged lands off the coasts of Louisiana and Texas. An additional 51 fields, discovered since December 31, 1981, have not been sufficiently developed to permit a reasonably accurate estimate of reserves. Original recoverable reserves are estimated to have been 9.31 billion barrels of oil and 106.2 trillion cubic feet of gas from 521 fields in the same geographic area. Included in this number are 16 fields that are depleted and were abandoned; not included are the 51 insufficiently developed fields. Estimates were made for individual reservoirs in 399 fields and on a fieldwide basis for the other 122 fields.

ANNO

06/10/1987

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ACC 2342

TYPE P

YEAR 1976

AUTH HICKS, D.B.;MURPHY, P.;WELDON, R.;LLOY, W.;REVELL, D.;CAVINDER, T.R.;

TITL DETERMINING AND MONITORING THE TOXICITY OF BAYTEX TO PINK SHRIMP AT SANIBEL ISLAND, FLORIDA. JUNE 14-28, 1976.

BIBL U.S. ENVIRONMENTAL PROTECTION AGENCY. REGION IV, SURVEILLANCE AND ANALYSIS DIVISION. 34 P.

KEYW LEE

PINK SHRIMP

PESTICIDE

BIOASSAY

ABST A pesticide monitoring study was conducted at Sanibel Island consisting of short term static toxicity bioassays and field monitoring for environmental concentrations and toxicity of Baytex in tidal surface waters of the nearshore bay areas and principal canal systems associated with the island. Monitoring was conducted prior to and following an aerial application of the pesticide. The incipient lethal concentration of Baytex to juvenile pink shrimp was found to result in a 100% mortality of juvenile pink shrimp contained in floating cages in the finger fill canal system. It was also found that nearshore aquatic areas were subjected to drift of the pesticide following aerial application.

ANNO

06/10/1987

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ACC 2355

TYPE P

YEAR 1974

AUTH HICKS, D.B.;BURNS, L.A.;

TITL MANGROVE METABOLIC RESPONSE TO ALTERATIONS OF NATURAL FRESHWATER DRAINAGE T
O SOUTHWESTERN FLORIDA ESTUARIES.

IN: BIOLOGY AND MANAGEMENT OF MANGROVES. G.E. WALSH, S.C. SNEDAKER, AND
H.J. TEAS (EDS.).

BIBL UNIVERSITY OF FLORIDA, GAINESVILLE, FL. 238-255 P.

KEYW COLLIER

METABOLISM

NUTRIENT

PRIMARY PRODUCTIVITY SALINITY

ABST The response of mangrove metabolism to alterations of freshwater drainage i
nto estuaries was studied in the Ten Thousand Islands area. Water borne mi
neral and nutrient transport is dependent on sheet flow of freshwater which
has been interrupted by drainage canals recently. Gross primary productiv
ity and diel rates of metabolism were measured. Mangroves responded to a d
ecreasing gradient of freshwater by gross productivity increases, respirati
on increases, and net productivity decreases.

ANNO

06/10/1987

.....
ACC 676
TYPE
YEAR 1983
AUTH HIETT, R.L.;CHANDLER, K.A.;RENIERE, A.K.;BOLSTEIN, A.R.;
TITL SOCIOECONOMIC ASPECTS OF MARINE RECREATIONAL FISHING.

BIBL NATIONAL MARINE FISHERIES SERVICE, WASHINGTON, D.C. 101 PP.

KEYW COASTAL WATER RECREATION SOCIOECONOMIC
SPORT FISHING STATISTICAL ANALYSIS RECREATIONAL FISHERY

ABST The 1981 Socioeconomic Survey of Marine Recreational Fishermen consisted of a telephone survey of approximately 2,400 fishing households and personal interviews with 7,000 anglers at the fishing site on the three coastal areas of the contiguous United States when the fishing was completed. The on-site interviews were followed by a telephone interview to obtain completed trip information. The survey obtained information in the following areas: (1) information about marine recreational fishermen, (2) information about marine fishing trips in general, (3) trip expenditure information, (4) catch and disposition of catch information, and (5) information about angler satisfaction. Marine recreational fishing is an activity widely participated in along all coastal areas of the contiguous United States. Expenditures associated with fishing are quite large and travel distances substantial. Fish which are caught are kept for eating or returned to the water alive. The great majority of marine anglers are satisfied with their fishing experiences.

ANNO

06/10/1987

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ACC 4238
TYPE P
YEAR 1977
AUTH HIGMAN, J.B.;
TITL PROCEEDINGS OF THE GULF AND CARIBBEAN FISHERIES INSTITUTE NO. 29 BROWNSVILLE, TEXAS (USA) NOVEMBER 8-10, 1976.

BIBL PROC. GULF CARIBB. FISH. INST. 183.

KEYW SNAPPER	GROUPER	SHRIMP
FISHERY	BROWN SHRIMP	SPINY LOBSTER
COMMERCIAL FISHERY		

ABST The 17 papers were presented in 4 sessions: extended jurisdiction, marketing and technology, continental shelf and crustacean. Specific topics concerned the effects of fishing on the Atlantic croaker (*Micropogon undulatus*); the northern Gulf of Mexico groundfish fishery; commercial snapper-grouper fisheries off South Carolina, USA; incidental catch of the South Carolina shrimp fishery; marked juvenile brown shrimp (*Penaeus aztecus*) in a Louisiana, USA coastal marsh; trap fishing for spiny lobster (*Panulirus argus*) in the Bahamas; and spiny lobster studies in south Florida. Graphs, tables and photographs supplement the text. Appropriate papers are indexed in BIORESEARCH INDEX.

ANNO

06/10/1987

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ACC 4181
TYPE P
YEAR 1981
AUTH HILEMAN, B. ;
TITL OFFSHORE OIL DRILLING.

BIBL ENVIRON. SCI. TECHNOL. 15(11):1259-1263.

KEYW OFFSHORE DRILLING

ABST The author discusses how the rapid development of the outer continental shelf will affect the environment.

ANNO

06/10/1987

.....
ACC 2509
TYPE P
YEAR 1976
AUTH HIXON, R.F.;
TITL STUDIES ON THE ABUNDANCE OF ANIMALS CAPTURED IN ARTIFICIAL HABITATS IN CARD
SOUND, FLORIDA.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL.

KEYW DADE	ARTIFICIAL HABITAT	HABITAT
SUBSTRATE	FISH	SPINY LOBSTER
BENTHIC	COMMUNITY	INVERTEBRATE
DIVERSITY	TEMPERATURE	SALINITY
DO	TURBIDITY	CURRENTS

ABST Artificial habitats and substrates were used to evaluate the effects of effluents from the Florida Power and Light power plant at Turkey Point. The abundance of fishes and spiny lobsters measured from habitat catches was greater in central Card Sound than near shore due to the more diverse natural environment found in Card Sound. Populations of fishes attracted to the habitats were generally low throughout the year in Card Sound. The spiny lobster was both more abundant and of a larger mean size in Card Sound than previously estimated. Although mesh panel catches showed amphipods to be the most abundant invertebrate taxon, they also indicated tanaids, harpacticoid copepods, ostracods, leptostracans, and caecid gastropods are important members of the Card Sound benthic community. Power plant effluents discharged into Card Sound caused with a change in temperature of 2-3 degree C above ambient, caused some stratification of the Sound during summer. Large amounts of organic debris were carried into the Sound by discharge currents and some erosion occurred in the canal mouth. Favorable conditions were created by effluents near the Card Sound canal for particulate feeders, detritivores, and sessile invertebrate predators. The abundance of two species, the gastropod, *Meloceras nitidum*, and the ostracod, *Cypridina squamosa*, was reduced by effluent effects. Catches of fishes, lobsters, and mesh panel community diversities were not adversely affected by discharges.

ANNO

06/10/1987

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ACC 358

TYPE

YEAR 1975

AUTH HO, F.P.;SCHWERDT, R.W.;GOODYEAR, H.V.;

TITL SOME CLIMATOLOGICAL CHARACTERISTICS OF HURRICANES AND STORMS ON THE GULF AND EAST COASTS OF THE UNITED STATES.

BIBL NATIONAL WEATHER SERVICE, NOAA TECHNICAL DEPARTMENT, NWS-15.

KEYW COASTAL ZONE
PHYSICAL PROCESS

HURRICANE
STORM

METEOROLOGY

ABST

ANNO

06/10/1987

.....
ACC 2510

TYPE P

YEAR 1975

AUTH HOBERG, C.M.;

TITL RESPONSE OF MATURE, MALE BLUE CRABS, CALLINECTES SAPIDUS RATHBUN, TO LABORATORY THERMAL GRADIENTS, WITH NOTES ON MATURE, FEMALE STONE CRABS, MENIPPE MERCENARIA (SAY).

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL. 134 P.

KEYW DADE
STONE CRAB

BLUE CRAB
TEMPERATURE

BEHAVIOR

ABST Thermal gradient responses observed in the field led to the laboratory study of temperature influences on *Callinectes sapidus* behavior. Crabs were acclimated to ambient summer mean temperatures and subjected to standing and shifting steep gradients over a two day period. Warm acclimated crabs showed a greater preference than slightly cold acclimated crabs for higher temperatures. Blue crabs obtained from Ft. Myers behaved similarly to Biscayne Bay crabs. Comparisons were made with stone crabs.

ANNO

06/10/1987

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ACC 374

TYPE

YEAR 1972

AUTH HOESE, H.D.; NELSON, W.R.; BECKERT, H.;

TITL SEASONAL AND SPATIAL SETTLING OF FOULING ORGANISMS IN MOBILE BAY AND EASTERN MISSISSIPPI SOUND, ALABAMA.

BIBL ALABAMA MAR. RESOUR. BULL. 8:9-17.

KEYW BIOLOGY

SALINITY

SEASONALITY

FOULING ORGANISM

FOULING

OYSTER

MOLLUSC

ABST

ANNO

06/10/1987

.....
ACC 774
TYPE
YEAR 1964
AUTH HOESE, H.D.;
TITL STUDIES ON OYSTER SCAVENGERS AND THEIR RELATION TO THE FUNGUS DERMOCYSTIDIUM MARINUM.

BIBL PROC. NATL. SHELLFISH. ASSOC. 53:161-174.

KEYW BIOLOGY COMMERCIAL FISHERY DISEASE
 ECOLOGY OYSTER PARASITE

ABST *Dermocystidium marinum*, a parasitic fungus of oysters, was demonstrated from the stomachs of the snail, *Urosalpinx cinerea*, from the stomach, intestine and body of three fishes, *Gobiosoma boscii*, *Chasmodes bosquianus*, and *Opsanus tau*, and from the body, especially the setae, of two crabs, *Neopanope texana* and *Rhithropanopeus harrisi*. All animals containing *D. marinum* had scavenged oysters infected by the fungus. A few oysters became lightly infected when kept in aquaria with fishes that had been fed infected oyster tissue. It is concluded that nearly all dying oysters are consumed by animals during periods of normal mortality, so their parasites must pass through the digestive system of scavengers.

ANNO

06/10/1987

.....
ACC 1083

TYPE

YEAR 1977

AUTH HOESE, H.D.; MOORE, R.H.;

TITL FISHES OF THE GULF OF MEXICO; TEXAS, LOUISIANA, AND ADJACENT WATERS.

BIBL TEXAS A&M UNIVERSITY PRESS. 327 PP.

KEYW BIOLOGY
ZOOLOGY

FISH
DISTRIBUTION

SPECIES COMPOSITION

ABST

ANNO

06/10/1987

.....
ACC 844
TYPE
YEAR 1974
AUTH HOFFMAN, H.J. ;
TITL A COMPARISON OF ORGANIC MATTER IN RIVER WATER AND SEA WATER.

BIBL MASTER'S THESIS. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 74 PP.

KEYW	AMINO ACIDS	CARBOHYDRATE	CARBON
	NITROGEN	PHOSPHATE	SALINITY
	ORGANIC CARBON	CHLOROPHYLL	NUTRIENT

ABST Particulate and dissolved organic carbon and salinity were measured at 26 stations around the South and Southwest passes of the Mississippi River in an attempt to compare river and sea organic matter. Samples were collected at 4 stations and analyzed for phosphate, chlorophyll A, carbohydrates, amino acids, particulate organic nitrogen and carbon isotope ratios. Samples were collected in October, 1971 during cruise 71-A-12 of the R/V Alaminos.

ANNO

06/10/1987

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ACC 792

TYPE

YEAR 1979

AUTH HOLLAND, J.S.;

TITL BENTHIC INVERTEBRATES: MACROINFAUNA AND EPIFAUNA.

IN: ENVIRONMENTAL STUDIES, SOUTH TEXAS OUTER CONTINENTAL SHELF, BIOLOGY
AND CHEMISTRY. FINAL REPORT. CHAPTER 17.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA.

KEYW BENTHIC COMMUNITY	BENTHIC FAUNA	BIOLOGY
ECOLOGY	SPECIES COMPOSITION	INFAUNA
EPIFAUNA		

ABST

ANNO

06/10/1987

.....
ACC 2356
TYPE P
YEAR 1962
AUTH HOLMES, C.W.;
TITL SEDIMENTS OF THE TEN THOUSAND ISLANDS.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW COLLIER SEDIMENT GRAIN SIZE

ABST The nature of the sediments of the Ten Thousand Islands was studied from samples collected at 8 stations during June 1960. Four physiographic areas were identified: mangrove barrier, coarse quartz sand, fine quartz sand, and a mixture of the 2 sand populations. The locations of these areas and the methods of their formation are discussed.

ANNO

06/10/1987

.....
ACC 2420
TYPE P
YEAR 1978
AUTH HOLM, R.F.;
TITL THE COMMUNITY STRUCTURE OF A TROPICAL MARINE LAGOON.

BIBL ESTUAR. COAST. MAR. SCI. 7:329-345.

KEYW MONROE	COMMUNITY	STRUCTURE
ABUNDANCE	DIVERSITY	PHYTOPLANKTON
TEMPERATURE	SALINITY	CURRENTS
TIDE	SEDIMENT	

ABST The community structure of a tropical marine lagoon in the upper Florida Keys was described. The amount of vegetation present and the stability of the sediment was found to modify the abundance and diversity of the benthic macrofauna. The uniqueness of this environment made it possible to examine the changes in species abundance and diversity as a detritus based food web graded into a phytoplankton based food web.

ANNO

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ACC 4054
 TYPE P
 YEAR 1981
 AUTH HOLMES, C.W. ;
 TITL LATE NEOGENE AND QUARTERNARY GEOLOGY OF THE SOUTHWESTERN FLORIDA SHELF AND SLOPE.

BIBL U.S. GEOLOGICAL SURVEY OPEN-FILE REPORT 81-1029. 27 P.

KEYW	GEOPHYSICAL	SEISMIC	GEOLOGY
	CONTINENTAL SHELF	CONTINENTAL SLOPE	BATHYMETRY
	REEF	BED FORM	GEOLOGIC HISTORY

ABST Seismic information obtained during a high-resolution geophysical survey of the southwestern Florida (south of lat 26 degrees N) shelf suggests that the modern shelf and slope overlie a karstic Miocene(?) platform. The platform surface is covered by a lens of late Tertiary-Quaternary sediments, which thicken from the central shelf to a maximum of 150 m at the upper slope break and thin against the ridgelike outcrop of the Miocene(?) platform on the upper slope. A 8-km wide north-trending double reef complex on the central shelf separates the post-Miocene sediments offshore from the subcropping Miocene(?), which is thinly covered by a veneer of biogenic sand. Over the thickest post-Miocene section and marking the edge of the modern shelf is a second double-reef complex. The lower reef of this set forms a well-developed 40-m scarp; the upper reef is characterized for most of its extent by a low-magnitude ridge. In addition to the reefs, two stratigraphic units are recognized above the Miocene(?): (1) a lower unit of unknown age, which can be traced under the shelf-edge reefs and is continuously overlapping the Miocene(?) ledge of the central shelf; and (2) an upper limit, which is composed of sediment derived from the shelf edge and pelagic sources and exhibits evidence of downslope creep by its accordionlike morphology on the lowermost portion. A Miocene(?) ridge (400-510 m) below sea level trends north-south along the west-facing Continental Slope of the Florida shelf. This ridge is buried in the Florida Straits region. The reefs that mark the shelf break and central shelf are also being covered by more recent mater

ANNO

06/10/1987

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ACC 4055
TYPE P
YEAR 1985
AUTH HOLMES, C.W.;
TITL ACCRETION OF THE SOUTH FLORIDA PLATFORM, LATE QUATERNARY DEVELOPMENT.

BIBL AM. ASSOC. PETROL. GEOL. BULL 69(2):149-160.

KEYW GEOLOGY	GEOPHYSICAL	CONTINENTAL SHELF
SEDIMENT	SEISMIC	BED FORM
REEF	CONTINENTAL SLOPE	GEOLOGIC HISTORY

ABST Stratigraphic information from high-resolution seismic data obtained across the southwest Florida platform indicates that the modern shelf is a constructional platform with Pliocene(?) - Pleistocene and Holocene sediments resting on an eroded karstic Miocene platform. The Miocene surface dips away from the coastline with significant breaks in slope occurring at the center of the shelf and at the shelf edge. At the southwest corner of the platform, this surface crops out to form a terrace. This terrace lies along the west-facing continental slope of the Florida shelf and is progressively buried to the south by younger deposits--reefs and sediment--so that it has no surface expression in the Florida Straits. A paired reef complex rests on the thickest post-Miocene sediments that mark the edge of the modern shelf. The deepest reef forms a well-developed escarpment with its crest buried by approximately 15 m (50 ft) of sediment. The shallower reef is a low swell over most of its extent but develops into a large reef-spit complex (Howell Hook) in the central part of the study area. Within the Pliocene-Pleistocene and Holocene sediments, two stratigraphic units can be delineated: (1) a lower progradational unit of Pliocene-Pleistocene(?) age that can be traced under the shelf-edge reef and continuously onlaps the Miocene(?) surface, and (2) an upper unit of late Pleistocene-Holocene age which is composed of reef and pelagic sediment. Two sedimentary "fans" have been identified on the northern slope and floor of the Florida Straits. The apices are set in at gaps in the carbonate ridge rimming the southern Florida shelf.

ANNO

06/10/1987

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ACC 4280

TYPE P

YEAR 1978

AUTH HOLMES, C.W.; MARTIN, E.A.;

TITL MIGRATION OF ANTHROPOGENICALLY INDUCED TRACE METALS (BARIUM AND LEAD) IN A
CONTINENTAL SHELF ENVIRONMENT.

BIBL AMER. CHEM. SOC. 672-676.

KEYW TRACE METAL	BARIUM	CONTINENTAL SHELF
SEDIMENT	PHYSICAL	CHEMICAL
CONTINENTAL SLOPE	LEAD	POLLUTION

ABST Variation in the rates of sediment accumulation is one of the most important factors affecting physical and chemical processes within a sedimentary basin. During the past decade, a method based on ²¹⁰Pb disequilibrium has been devised that enables the rates of sediment accumulation to be measured for the last 150 years (BP), the time encompassed by the industrial revolution of the North American Continent. The rates of sediment accumulation at 22 sites on the Continental Shelf and Upper Continental Slope in the northwestern Gulf of Mexico were determined. The rates varied from zero to greater than 7 mm per year. In an area of rapidly accumulating sediments on the central Texas shelf, south of Matagorda Bay, trace-metal profiles indicate that an increase in barium and lead has taken place in the sediments within the recent past. The rates of sedimentation as calculated by the ²¹⁰Pb method reveal that this increase has occurred within the last 25 years. Further inspection of the data indicates that the leading edge of the metal-contaminated sediment is migrating across the shelf at an average rate of 2 km per year.

ANNO

06/10/1987

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ACC 2235

TYPE P

YEAR 1976

AUTH HOOKS, T.A.;HECK, K.L., JR.;LIVINGSTON, R.J.;

TITL AN INSHORE MARINE INVERTEBRATE COMMUNITY STRUCTURE AND HABITAT ASSOCIATION
IN THE NORTHEASTERN GULF OF MEXICO.

BIBL BULL. MAR. SCI. 26(1):99-109.

KEYW COMMUNITY
ANNELIDA
POLLUTION

ARTHROPODA
ECHINODERMATA
STRUCTURE

MOLLUSCA
ALGAE

ABST Monthly trawl samples were collected from unpolluted (Ecofina estuary) and polluted (Fenholloway estuary) waters from July 1971 to December 1972 to compare epibenthic community structure. A total of 79 species were found, representing 4 phyla: Arthropoda, Mollusca, Annelida, and Echinodermata. Although the number of species from each estuary was not significantly different, the Ecofina estuary yielded more than 2 1/2 times the number of individuals as the Fenholloway estuary. Abundance of the numerically dominant species was relatively greater in the Ecofina estuary. Four different macro invertebrate assemblages were sampled in the study area, each associated with a different habitat: grassbeds, oyster reefs, mudflats, and red algae.

ANNO

06/10/1987

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ACC 25
TYPE
YEAR NA
AUTH HOPKINS, T.S.;
TITL EFFECTS OF PESTICIDES ON ESTUARINE PRODUCTIVITY.

BIBL NATIONAL MARINE FISHERIES SERVICE, BUREAU OF COMMERCIAL FISHERIES. 40 PP.

KEYW BENTHIC FAUNA	CARBOHYDRATE	DEMERSAL FISH
DISSOLVED OXYGEN	ESTUARY	FLORA
NITRATE	PELAGIC FISH	PESTICIDE
POLLUTION	PRODUCTIVITY	

ABST Environmental parameters were monitored in Mulatto and Thompson's Bayous, Escambia Bay, Florida. Measurements included salinity, temperature, dissolved oxygen, nitrates, carbohydrates, secchi disc depth, counts and identifications of fish, benthic animals, and plankton.

ANNO

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ACC 236
 TYPE
 YEAR 1973
 AUTH HOPKINS, T.S;
 TITL ZOOPLANKTON.

IN: J.I. JONES, R.E. RING, M.O. RINKEL, AND R.E. SMITH (EDS.). A
 SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBURG, FL.

KEYW LOOP CURRENT	BIOLOGY	COASTAL WATER
CURRENTS	ESTUARY	ZOOLOGY
ZOOPLANKTON		

ABST Zooplankton in the eastern Gulf, a warm temperature-subtropical region, seems to show distinct seasonality in abundance. In estuaries and on the southwest Florida shelf biomass maximum appears in summer whereas in shelf waters of the central and northeastern Gulf the seasonal maximum occurs in winter. No seasonal trend is as yet evident for the Loop Current. Annually, averages for zooplankton biomass range from 0.88 to 0.80 ml/m³, 0.02 to 0.10 ml/m³ and 0.01 to 0.10 ml/m³ in estuarine, shelf, and eastern Central Gulf regions, respectively. Locally both on the shelf and in estuaries biomass can be much higher. The principal holoplankton species in terms of biomass in estuaries appears to be *Acartia tonsa*. In summer meroplankton significantly augments plankton biomass in inshore waters. The principal hydrographic factors regulating zooplankton distribution in the eastern Gulf are the Loop Current, Mississippi River, and runoff from other small rivers. Upwelling generated by the Loop Current appears to be responsible for the maximum on the southwest Florida shelf while the Mississippi and other river discharge along with cool meteorological conditions may be primarily responsible for winter peaks on the northern Gulf shelf. Biological factors in addition to annual temperature and runoff cycles may affect seasonal abundance of estuarine zooplankton. There is evidence that ctenophores and scyphomedusae play a major role in regulating dynamics of estuarine microzooplankton. Studies on taxonomic composition of plankton have shown that certain species of pteropods, foraminiferans, and planktonic shrimp can be used to define the

ANNO

06/10/1987

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ACC 1046
TYPE
YEAR 1971
AUTH HOPKINS, T.S.;
TITL EFFECTS OF PESTICIDES ON ESTUARINE PRODUCTIVITY, II.

BIBL NATIONAL MARINE FISHERIES SERVICE.

KEYW ESTUARY	FISH	PESTICIDE
PHYTOPLANKTON	PRODUCTIVITY	WATER QUALITY
PCB	POLLUTION	

ABST An ecological investigation of Mulatto and Thompson's bayous, Escambia Bay, Florida, was carried out in order to describe water quality and productivity. Water quality was determined biweekly at 15 stations, phytoplankton standing crop at 9 stations, and fish standing crop at 3 stations. Arochlor 1254, a polychlorinated biphenyl, was measured in representative samples of 11 animals collected.

ANNO

06/10/1987

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ACC 1047
TYPE
YEAR 1971
AUTH HOPKINS, T.S.;
TITL EFFECTS OF PESTICIDES ON ESTUARINE PRODUCTIVITY, III.

BIBL NATIONAL MARINE FISHERIES SERVICE.

KEYW	ESTUARY	FISH	PESTICIDE
	PHYTOPLANKTON	PRODUCTIVITY	WATER QUALITY
	PCB	POLLUTION	

ABST Environmental parameters were measured in Mulatto and Thompson's Bayous, Escambia Bay, Florida, in an effort to describe the effects of pesticides on productivity. Five water quality parameters were monitored weekly at 12 stations and fish and plankton productivities were measured at 1 and 3 stations respectively. Arochlor 1254, a PCB, was monitored in several fish populations at 3 stations and in an oyster population at one station. Dieldrin, DDE, DDE and DDT were measured in catfish held in cages at one station in Thompson's Bayou.

ANNO

06/10/1987

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ACC 1048

TYPE

YEAR NA

AUTH HOPKINS, T.S.;

TITL SPORT FISHING ACTIVITY ON PENSACOLA BRIDGE AND PENSACOLA MAIN BEACH.

BIBL DAUPHIN ISLAND SEA LAB, DAUPHIN ISLAND, AL.

KEYW DEMERSAL FISH

SPORT FISHING

FISHING PRESSURE

RECREATIONAL FISHERY

PELAGIC FISH

ABST The sport fishery of Pensacola bridge and Pensacola main beach was studied during 1972. Counts and identifications of fish were made, as well as data on the fishing population/pressure.

ANNO

06/10/1987

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ACC 1074
TYPE
YEAR 1979
AUTH HOPKINS, T.S.;
TITL MACROEPIFAUNA.

IN: THE MISSISSIPPI, ALABAMA, FLORIDA OUTER CONTINENTAL SHELF
BASELINE ENVIRONMENTAL SURVEY. CHAPTER 17.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C.

KEYW CRUSTACEA BIOLOGY EPIFAUNA
 SPECIES COMPOSITION TAXONOMY MAFLA

ABST Macroepifaunal invertebrates were collected by dredging and trawling at 19 localities in the MAFLA tract of the eastern Gulf of Mexico over three seasons in 1977-1978. In addition, archived samples, from 20 dredge/trawl and 6 dive stations, were also analyzed. Results report a species list of 51 coelenterates, 260 molluscs, 250 decapod crustaceans, 15 stomatopod crustaceans, 9 Pycnogonida, and 95 Echinodermata to the generic rank and below; 26 Families of the Polychaeta are reported. Molluscs were found to be good potential indicators of seasonality and decapod crustaceans and echinoderms may be good indicators of substrate at certain depths. Faunal assemblages are stronger along contour gradients and species numbers decrease with depth. Each station appears to have a characteristic assemblage which probably relates to such factors as annual temperature and substrate. There is continuing evidence that the MAFLA macroepifauna has its greatest affinities with West Indian stocks.

ANNO

06/10/1987

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ACC 2099
TYPE P
YEAR 1977
AUTH HOPKINS, T.S.;
TITL EPIFAUNAL AND EPIFLORAL BENTHIC COMMUNITIES IN THE MAFLA YEAR 02 LEASE AREA
(1975/76).

BIBL UNPUBL. REPORT. U.S. DEPARTMENT OF INTERIOR, BLM, WASHINGTON, DC. 98 P.

KEYW BENTHIC	EPIBIOTA	MOLLUSC
CRUSTACEAN	ECHINODERM	OCTOCORALLIA
SCLERACTINIA	POLYCHAETE	SPONGE
ASSEMBLAGE	REEF	LOOP CURRENT
TEMPERATURE	SALINITY	DO

ABST This report presents the results of the epibiota study of the Bureau of Land Management sponsored program in the Mississippi, Alabama, Florida (MAFLA) outer continental shelf. A total of 236 species of molluscs, approximately 190 species of crustaceans, over 65 species of echinoderms, 25 species of Octocorallia, 30 species of Scleractinia, over 100 species of polychaetes, 48 species of sponges, and 194 species of algae were collected in the study of dredges, trawls and diving. Trellis diagrams portraying faunal similarity between stations and seasons are presented for each major taxa. Three distinct shelf assemblages were recognized in the study: 1) Middle Shelf I (30-60 m); 2) Middle Shelf II (60-140 m); 3) Deep Shelf (140 m - shelf break). The Florida Middle Ground reef is recognized to contain unique faunal and floral assemblages (dissimilar to the West Florida Garden Bank reef in the Northwestern Gulf of Mexico) that recruit their larvae from the loop current.

ANNO

06/10/1987

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ACC 2100

TYPE P

YEAR 1981

AUTH HOPKINS, T.S.; VALENTINE, J.S.;

TITL THE ECHINODERM FAUNA OF THE CONTINENTAL SHELF OF THE EAST AND CENTRAL GULF
OF MEXICO.

BIBL INTERNAT. ECHINODERM CONF., TAMPA, FL.

KEYW ECHINODERM

DEPTH

HABITAT

ABST Approximately 100 echinoderm species covering five classes were identified in bottom studies of the continental shelf of the east and central Gulf of Mexico in waters 30 to 200 m deep from 1974 to 1978. Depth zones and habitats characterized by recurring taxa were classified at 30-60 m, 90-110 m, and 180-200 m. Observations were made of Echinaster, the rare species *Opioderma pallidum*, and an apparently endemic *Ophiactis*.

ANNO

06/10/1987

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ACC 2101

TYPE P

YEAR 1977

AUTH HOPKINS, T.S.;BLIZZARD, D.R.;BRAWLEY, S.A.;ET AL.;

TITL A PRELIMINARY CHARACTERIZATION OF THE BIOTIC COMPONENTS OF COMPOSITE STRIP
TRANSECTS ON THE FLORIDA MIDDLE GROUNDS, NORTHEASTERN GULF OF MEXICO.

IN: PROC. THIRD INTERNAT. CORAL REEF SYMP. VOL. 1. BIOLOGY. P. 31-37.

BIBL ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERE, UNIVERSITY OF MIAMI.

KEYW COELENTERATE

MOLLUSCAN

CRUSTACEAN

ECHINODERM

POLYCHAETE

PORIFERAN

INVERTEBRATE

REEF

ICHTHYOFAUNA

LOOP CURRENT

ABST The coelenterate, molluscan, decapod crustacean, echinoderm, polychaete, and poriferan fauna of the Florida Middle Grounds was described and compared with that of the West Flower Garden Bank of the northwestern Gulf of Mexico. Sharp dissimilarities were found in the composition of the invertebrate faunas of the two reef areas, but their ichthyofaunas were less dissimilar. The Florida Middle Grounds has a more dense seasonal algal flora than does the West Flower Garden Bank. Both temperate and tropical species occur in the Middle Grounds, which are probably maintained by the Florida Loop Current moving warm water up from the Florida Keys.

ANNO

06/10/1987

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ACC 2102
TYPE P
YEAR 1977
AUTH HOPKINS, T.S.;BLIZZARD, D.R.;GILBERT, D.K.;
TITL THE MOLLUSCAN FAUNA OF THE FLORIDA MIDDLE GROUNDS WITH COMMENTS ON ITS ZOOG
EOGRAPHICAL AFFINITIES.

BIBL NORTHEAST GULF SCI. 1(1);39-47.

KEYW MOLLUSCAN SUBSTRATE ZOOGEOGRAPHY
 TEMPERATURE

ABST A study was made of the molluscan fauna of the Florida Middle Ground during June and September 1975 and February-March 1976 to determine the effect th at discontinual substrate distribution has on molluscan fauna. Of the 75 s pecies collected, more are of the "Caribbean eurythermic" and "Caribbean re stricted" forms. Analysis of the results indicate that the zoogeographic s tatus of the Gulf of Mexico should be reconsidered for other faunal groups.

ANNO

06/10/1987

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ACC 4056

TYPE P

YEAR 1982

AUTH HOPKINS, T.L.;

TITL THE VERTICAL DISTRIBUTION OF ZOOPLANKTON IN THE EASTERN GULF OF MEXICO.

BIBL DEEP SEA RES. 29(9A):1069-1083.

KEYW ZOOPLANKTON
BIOLOGY

COMMUNITY BIOMASS
ICHTHYOPLANKTON

DISTRIBUTION
WATER COLUMN

ABST The zooplankton community in the eastern Gulf of Mexico was investigated to determine the quantity and taxonomic composition of forage available to higher trophic levels and to provide a data base for future trophodynamic modelling. Standing stock (1.2 g m⁻² dw) in the upper 1000 m is in the range for oligotrophic low latitude boundary currents but is greater than in central gyre areas. Abundance decreases exponentially with depth, over half the biomass occurring in the upper 200 m. Diel variations are apparent, the greatest differences in biomass occurring in the upper 50 m and at 300 to 350 m. Copepods were dominant, contributing over 80% of the number and half the net-caught biomass. The zooplankton community is diverse, 21 genera individually exceeding 1% of the biomass in the 0 to 1000-m layer. Grazers (herbivores, detritivores, omnivores) were 66% of the 0 to 1000 m standing stock and carnivores 34%, their biomass in the epipelagic zone above the base of the thermocline (150 m) at night increasing 46 and 57%, respectively. Zooplankton biomass available as forage for higher trophic levels is most concentrated in the upper 50 m, whereas, paradoxically, the zooplanktivorous micronekton, the myctophid fishes in particular, are centered deeper, primarily between 50 and 150 m.

ANNO

06/10/1987

.....
ACC 4057
TYPE P
YEAR 1984
AUTH HOPKINS, T.L.;LANCRAFT, T.M.;
TITL THE COMPOSITION AND STANDING STOCK OF MESOPELAGIC MICRONEKTON AT 27 DEGREES
N 86 DEGREES W IN THE EASTERN GULF OF MEXICO.

BIBL CONTR. MAR. SCI. 27:143-158.

KEYW BIOLOGY	BIOMASS	COMMUNITY
FISH	ICHTHYOPLANKTON	INVERTEBRATE LARVAE
CRUSTACEA	WATER COLUMN	INVERTEBRATE

ABST A series of oblique 0-1000 m tows (28) made with 6.5 sq. meter Tucker trawls were used to determine the standing stock of micronekton in the eastern Gulf of Mexico in June and September, 1981. The principal groups were semaeostome scyphomedusae, fishes, and crustaceans, which constituted 48.3%, 34.7% and 12.6%, respectively of total micronekton biomass (5371 kg WW/km square). Semaesome scyphomedusae, though averaging almost half the WW biomass, were uncommon and occurred in only five tows. Cyclothone spp. fishes were the numerically dominant taxa and averaged 34.1% of the total micronekton numbers. Faunal diversity was high with 148 fish and crustacean species being identified. Diel vertical migration was apparent: 45% of the numbers and 55% of the biomass of micronekton migrated into the upper 40 m at night. Comparison with what little geographical information is available revealed that micronekton biomass in the upper 1000 m in eastern Gulf of Mexico is similar to that in waters adjacent to Hawaii but considerably greater than standing stocks in the Caribbean Sea off Puerto Rico.

ANNO

06/10/1987

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ACC 4234

TYPE P

YEAR 1981

AUTH HOPKINS, T.L.; ET AL.;

TITL THE LANDWARD DISTRIBUTION OF OCEANIC PLANKTON AND MICRONEKTON OVER THE WEST
FLORIDA USA CONTINENTAL SHELF AS RELATED TO THEIR VERTICAL DISTRIBUTION.

BIBL J. PLANKTON RES. 3(4):645-658.

KEYW DISTRIBUTION
FISH

DEPTH
CURRENTS

SHRIMP
CRUSTACEA

ABST The landward distributions of 69 plankton and 92 micronekton species over the west Florida continental shelf were examined in relation to their vertical distribution in the eastern Gulf of Mexico. Using linear and power-curve regressions, it was found that extent of landward occurrence is significantly correlated with bottom topography in terms of bottom depth and distance from the open Gulf. Epipelagic plankton species were distributed considerable distances across the shelf; the mesopelagic shrimp and fish species were not found landward of slope stations. Possible factors affecting landward distribution, such as currents, vertical migration patterns and predation, are discussed.

ANNO

06/10/1987

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ACC 1084
TYPE
YEAR 1970
AUTH HORN, M.H. ;
TITL SYSTEMATICS AND BIOLOGY OF THE STROMATEID FISHES OF THE GENUS PEPRILUS.

BIBL BULL. MUS. COMP. ZOOL. 140(5):165-261.

KEYW BIOLOGY FISH LIFE HISTORY
 TAXONOMY ZOOLOGY

ABST

ANNO

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ACC 4214
 TYPE P
 YEAR 1977
 AUTH HOROWITZ, A.; PRESLEY, B.J.;
 TITL TRACE METAL CONCENTRATIONS AND PARTITIONING IN ZOOPLANKTON, NEUSTON, BENTHOS FROM THE SOUTH TEXAS OUTER CONTINENTAL SHELF.

BIBL ARCH. ENVIRON. CONTAM. TOXICOL. 5(2):241-255.

KEYW TRACE METAL	NEUSTON	ZOOPLANKTON
SHRIMP	FISH	DISTRIBUTION
CHEMICAL	BIOLOGICAL	HEAVY METAL
POLLUTANT		

ABST Biological samples of zooplankton, surface plankton, sargassum, and benthos obtained at 12 stations on the south Texas outer continental shelf were analyzed for copper, zinc, cadmium, lead, chromium, nickel, iron, and manganese to establish both baseline metal concentrations and partitioning among parts and organs of the individual organisms. Benthos samples were primarily squid, shrimp, and fish. Chemical analyses showed shrimp exoskeletons and the skin of squid and fish generally contained higher metal levels than the flesh, probably due to adsorption from seawater and/or an internal detoxification procedure employed by the organism. Squid 'pens' contained higher levels of copper, cadmium, zinc, lead, and iron than skin or flesh, also probably the result of internal detoxification or as a means of storing necessary metabolites in the case of copper and zinc. Adsorption is not a factor as the pen is not directly exposed to seawater. A north-south directional increase in lead concentrations in organisms and an increase in cadmium from nearshore to offshore agrees with spatial distribution patterns in sediments. Statistical analyses of chemical and biological data indicates that relatively small changes in biological makeup of the sample can markedly affect concentrations of lead, cadmium, nickel, and zinc. Fish and shrimp contained some of the lowest metal levels of biota examined. All lead can be accounted for by copepods, ostracods, and larvacea.

ANNO

06/10/1987

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ACC 505
TYPE
YEAR 1972
AUTH HOSKIN, L.M.;
TITL OYSTER REEF SEDIMENTATION, BILOXI BAY AREA, MISSISSIPPI.

BIBL WATER RESOURCES RESEARCH INSTITUTE, MISSISSIPPI STATE UNIVERSITY, STARKVILL
E, MS. 39 PP.

KEYW BILOXI BAY	GULF OF MEXICO	MISSISSIPPI SOUND
MISSISSIPPI	GEOLOGY	OYSTERS
REEFS	SEDIMENTATION	SEDIMENTS

ABST

ANNO

06/10/1987

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ACC 2103
TYPE P
YEAR 1981
AUTH HOSS, D.E.;HETTLER, W.F.;
TITL GULF OF MEXICO FISHERIES: CURRENT STATE OF KNOWLEDGE AND SUGGESTED CONTAMINANT-RELATED RESEARCH.

IN: PROC. OF A SYMP. ON ENVIRON. RESEARCH NEEDS IN THE GULF OF MEXICO, KEY BISCAYNE, FLORIDA, 30 SEPT.-5 OCT. 1979. D.K. ATWOOD (CONVENER).
BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB., MIAMI, FL.
VOL IIB:161-185.
KEYW FISHERY POLLUTION

ABST This summary paper presents a selective discursive review of the Gulf of Mexico fishery resources and a discussion of the research programs that the authors believe offer a possible assessment of the environmental health of the area. Sections on the habitat, recent and ongoing fishery research, and research needs are provided.

ANNO

06/10/1987

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ACC 716
TYPE
YEAR 1975
AUTH HOTTMAN, W.E.;
TITL AREAL DISTRIBUTION OF CLAY MINERALS AND THEIR RELATIONSHIP TO PHYSICAL PROPERTIES, GULF OF MEXICO.

BIBL MASTER'S THESIS. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 53 PP.

KEYW KAOLINITE	MONTMORILLONITE	SEDIMENT TEXTURE
CLAY MINERALOGY	SEDIMENT	DISTRIBUTION

ABST Thirty-seven piston cores were collected from the Gulf of Mexico during cruises by the R/V Alaminos between 1965 and 1970. Samples were analyzed for clay minerals, grain size, water content, void ratio, shear strength, carbonate content and specific gravity. Data include maps which show percentages of each clay mineral in each sample location.

ANNO

06/10/1987

.....
ACC 4058
TYPE P
YEAR 1975
AUTH HOUDE, E.D.;
TITL ABUNDANCE AND POTENTIAL YIELD FOR FISHERIES DEVELOPMENT OF SOME SARDINE-LIKE FISHES IN THE EASTERN GULF OF MEXICO.

BIBL PROC. GULF CARIB. FISH. INST. 28TH ANN. SES.

KEYW BIOLGY	COMMERCIAL FISHERY	ICHTHYOPLANKTON
BIOMASS	RECRUITMENT	PELAGIC FISH
WATER COLUMN		

ABST A survey of eggs and larvae of sardine-like fishes was carried out in the Eastern Gulf of Mexico from 1971 to 1974 to determine adult biomass of these fishes and to evaluate their potential yield to commercial fisheries. The aggregate spawning biomass of sardine-like fishes was approximately 1.1 million metric tons during that period. Thread herring (*Opisthonema oglinum*) biomass averaged 241,000 tons; scaled sardine (*Harengula jaguana*) biomass averaged 184,000 metric tons; and round herring (*Etrumeus teres*) mean biomass was 379,000 metric tons. No estimates were obtained for Spanish sardine (*Sardinella* spp.) biomass, but it may be about 250,000 metric tons. The menhaden (*Brevoortia* spp.) resource apparently is small in the Eastern Gulf and its biomass was not estimated. The potential, maximum sustainable harvest of all sardine-like species on an annual basis likely does not exceed 525,000 metric tons from the Eastern Gulf of Mexico.

ANNO

06/10/1987

.....
ACC 4059
TYPE P
YEAR 1982
AUTH HOUDE, E.D.;
TITL KINDS, DISTRIBUTIONS AND ABUNDANCES OF SEA BASS LARVAE (PISCES: SERRANIDAE)
FROM THE EASTERN GULF OF MEXICO.

BIBL BULL. MAR. SCI. 32(2):511-522.

KEYW BIOLOGY	ICHTHYPOLANKTON	FISH
GROUPE	DISTRIBUTION	ZOOPLANKTON
SPAWNING AREA	WATER COLUMN	ABUNDANCE

ABST Occurrences, distributions and abundances of serranid larvae from the eastern Gulf of Mexico were described based on 505-um mesh bongo net collections made during 13 cruises in 1971-73. A diverse assemblage of serranid larvae was collected, totalling 5,350 individuals. Four subfamilies were represented and 11 genera and 14 species (or types) were identified. The most abundant serranid larva was *Diplectrum formosum*, followed by *Hemanthias vivanus*. Larvae of *D. formosum* were the fifth most common species of all fish larvae that were collected on the cruises and accounted for 55.5% of the serranids. Other common serranid larvae included *Serraniculus pumilio*, *Centropomus striata*, *Pronotogrammus aureorubens*, *Anthias* Type I, epinepheline larvae and *Rypticus* spp. Larvae of serranids were collected over the entire shelf area in the eastern Gulf during all seasons, but species that occurred differed by area, season and depth zone. Apparent differences in annual mean abundances were observed for some species. Relationships between occurrences and surface temperature and salinity were examined. Spawning seasons were inferred from the larval occurrence data.

ANNO

06/10/1987

.....
ACC 4060
TYPE P
YEAR 1977
AUTH HOUDE, E.D.;
TITL ABUNDANCE AND POTENTIAL YIELD OF THE SCALED SARDINE, HARENGULA JAGUANA, AND ASPECTS OF ITS EARLY LIFE HISTORY IN THE EASTERN GULF OF MEXICO.

BIBL FISH. BULL. 75(3):613-628.

KEYW BIOLOGY	ICHTHYOPLANKTON	COMMERCIAL FISHERY
DISTRIBUTION	RECREATIONAL FISHERY	SPAWNING AREA
RECRUITMENT	FISH	ZOOPLANKTON
SEASONALITY	WATER COLUMN	

ABST Eggs and larvae of the scaled sardine, *Harengula jaguana*, were collected in 1971-74 from the eastern Gulf of Mexico to determine spawning seasons, spawning areas, adult biomass, and fisheries potential. Aspects of the early life history of the species also were studied. Spawning occurred from January to September, but was most intense from May to August, when surface temperatures ranged from 20.8 degrees to 30.7 degrees Celsius and surface salinities were 29.9 to 36.9 o/oo. All spawning occurred between the coast and the 30-m depth contour, mostly within 50 km of the coast. The biomass of scaled sardines, based on annual spawning estimates, apparently increased from 1971 to 1973, the mean estimate for the 3 yr being 184,527 metric tons. Potential yield estimates, based on the 3-yr mean biomass, ranged from 46,000 to 92,000 metric tons. Larval abundance and mortality rates were estimated from 1973 data. More than 99.9% mortality occurred between time of spawning and attainment of 15.5 mm standard length at 20 days of age. Comparisons were made of scaled sardine distribution, abundance, potential yield, and larval mortality with those of the other eastern Gulf clupeids.

ANNO

06/10/1987

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ACC 4061

TYPE P

YEAR 1976

AUTH HOUDE, E.D.;CHITTY, N.;

TITL SEASONAL ABUNDANCE AND DISTRIBUTION OF ZOOPLANKTON, FISH EGGS, AND FISH LARVAE IN THE EASTERN GULF OF MEXICO, 1972-74.

BIBL NOAA TECHNICAL REPORT. NMFS SSRF-701. 18 P.

KEYW ZOOPLANKTON
DISTRIBUTION

ICHTHYOPLANKTON
SEASONALITY

BIOLOGY
WATER COLUMN

ABST Zooplankton volumes and abundance of fish eggs and fish larvae were determined for stations of 12 cruises to the western Florida continental shelf. Contour charts of zooplankton volumes and of ichthyoplankton abundance are presented. A marked seasonality was observed for zooplankton and ichthyoplankton, highest zooplankton volumes and ichthyoplankton abundance occurring during May through September. Zooplankton volumes were highest and spawning by fishes most intense in the northern half of the study area (north of latitude 27 degrees 15'N). Fish larvae abundance (number under 10 sq. m of sea surface) was highest at stations deeper than 50 m. Simple correlations among biological variables showed fish egg abundance-zooplankton volumes and fish egg abundance-fish larvae abundance to be positively correlated on most cruises. No clear relationships were observed between abundance or concentration of biological variables and temperature or salinity.

ANNO

06/10/1987

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ACC 4062

TYPE P

YEAR 1979

AUTH HOUDE, E.D.; LEAK, J.C.; DOWD, C.E.; BERKELEY, S.A.; RICHARDS, W.J.;

TITL ICHTHYOPLANKTON ABUNDANCE AND DIVERSITY IN THE EASTERN GULF OF MEXICO.

BIBL A REPORT FOR THE U.S. DEPARTMENT OF INTERIOR, BUREAU OF LAND MANAGEMENT,
GULF OF MEXICO OCS OFFICE, NEW ORLEANS, LA. CONTRACT #AA550-CT7-28.

KEYW BIOLOGY	ICHTHYPOLANKTON	COMMERCIAL FISHERY
DISTRIBUTION	RECREATIONAL FISHERY	SPAWNING AREA
RECRUITMENT	FISH	ZOOPLANKTON
SEASONALITY	WATER COLUMN	

ABST An ichthyoplankton survey, consisting of 17 cruises to the eastern Gulf of Mexico, was carried out from 1971-1974. Objectives of the survey were to determine the kinds and abundances of larval fishes, their distribution and diversity, and the relationship of their occurrence to environmental factors. From the egg and larval distributions, spawning areas and seasons were determined, and in some cases biomasses of adults were estimated. The surveys succeeded in providing important baseline data on the early life stages of fishes in the Gulf of Mexico. A total of 143,034 fish larvae were collected and included 91 families and 173 identified species. Most identified larvae were in the 10 most commonly collected families. The families Clupeidae and Gobiidae dominated larval catches at < 100 m deep stations while the Myctophidae were dominant at > 100 m deep stations. Annual abundances and mortality rates were estimated for the most common species. Adult biomasses of several species were estimated; pelagic fishes apparently have higher biomasses than demersal fishes in the eastern Gulf. There were no significant differences in ichthyoplankton diversity among years, seasons or between north and south sectors of the survey area; but diversity was significantly higher in offshore than in onshore zones. Effects of environmental factors on ichthyoplankton abundance were not clearly demonstrated but the modes and ranges of surface temperature, surface salinities, and station depth where common species occurred were clearly defined.

ANNO

06/10/1987

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ACC 40
TYPE
YEAR 1976
AUTH HSU, S.A.;
TITL ATMOSPHERIC DISPERSION CHARACTERISTICS IN THE LOUISIANA COASTAL ZONE.

BIBL CENTER FOR WETLAND RESOURCES, LOUISIANA STATE UNIVERSITY, BATON ROUGE, LA.
LSU-T-76-06-011(T).

KEYW ATMOSPHERIC CIRCULAT COASTAL ZONE POLLUTION
WIND

ABST Atmospheric dispersion characteristics in the coastal zone are unique in that physical processes of air, sea, and land combine at the shoreline to create motions on many scales which differ in important respects from processes over land or over water. Some of these differences in coastal Louisiana are reviewed. Synoptic-scale characteristics indicate that the coastal zone is superior to areas farther inland for dispersing pollutants. However, mesoscale and microscale studies reveal that diurnal circulation of land-breeze and sea-breeze systems and the development of an internal boundary layer because of aerodynamic roughness changes across the shoreline may actually increase pollution concentration in the nearshore region. Specific studies on these scales of atmospheric motion in relation to the optimum siting for industrial plants are outlined and recommended.

ANNO

06/10/1987

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ACC 84
TYPE
YEAR 1977
AUTH HSU, S.A. ;
TITL ATMOSPHERIC DISPERSION CHARACTERISTICS IN THE LOUISIANA COASTAL ZONE.

BIBL CENTER FOR WETLAND RESOURCES, LOUISIANA STATE UNIVERSITY, BATON ROUGE, LA.
TECHNICAL REPORT NO. 229. 29 PP.
KEYW ATMOSPHERIC CIRCULAT COASTAL ZONE LAND-SEA BREEZES
METEOROLOGY PHYSICAL PROCESS

ABST Atmospheric dispersion characteristics in the coastal zone are unique in that physical processes of air, sea, and land combine at the shoreline to create motions on many scales which differ in important respects from processes over land or over water. Some of these differences in coastal Louisiana are reviewed. Synoptic-scale characteristics indicate that the coastal zone is superior to areas farther inland for dispersing pollutants. However, mesoscale and microscale studies reveal that diurnal circulation of land-breeze and sea-breeze systems and the development of an internal boundary layer because of aerodynamic roughness changes across the shoreline may actually increase pollution concentration in the nearshore region. Specific studies on these scales of atmospheric motion in relation to the optimum siting for industrial plants are outlined and recommended.

ANNO

06/10/1987

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ACC 4314

TYPE P

YEAR 1982

AUTH HSU, S.A.;PRIOR, D.B.;WISEMAN, W.J., JR.;ROBERTS, H.H.;GILBERT, R.;

TITL COLLECTION OF REPRINTS.

BIBL TECH. REP. LA. STATE UNIV. COAST. STUD. INST. 382:2.

KEYW TEMPERATURE
SEDIMENT

STRESS

PHYSICAL

ABST The collection covers some mesoscale boundary-layer processes over coastal waters; submarine slope processes on a Fan Delta, Howe Sound, British Columbia; relationship between monthly frontal overrunning and offshore-onshore temperature differences across the central gulf coast; cold-water stress in Florida Bay and Northern Bahamas--A product of winter cold-air outbreaks; infrared transmittance of marine atmosphere; physical processes and sedimentation on a broad, shallow bank.

ANNO

06/10/1987

.....
ACC 4063
TYPE P
YEAR 1982
AUTH HSUEH, Y.;MARMARINO, G.O.;VANSANT, L.L.;
TITL NUMERICAL MODEL STUDIES OF THE WINTER-STORM RESPONSE OF THE WEST FLORIDA SH
ELF.

BIBL J. PHYS. OCEANOGR. 12:1037-1050.

KEYW CIRCULATION PHYSICAL OCEANOGRAPHY
 NUMERICAL MODEL METEOROLOGY EDDY FORMATION

ABST The wintertime, wind-driven ocean circulation on the West Florida Continental Shelf is studied within the framework of a linearized storm-surge model. The model bathymetry incorporates a realistic shelf, extending from New Orleans to the southern tip of Florida, and a deep ocean region. The boundary condition at the coast is that there is no normal flow. At the open boundaries, located off the shelf in deep water, the adjusted sea level is fixed at zero. It is found that 1) a coastally trapped response is achieved within one local inertial period following the imposition of the wind; 2) the curved coast forces a mass exchange between the coastal water and the deep ocean; 3) this exchange leads to the generation of a series of mesoscale eddies along the shelf edge; and 4) these eddies give rise to long-period, shelf-wide oscillations that persist beyond the local spin-up time. A hindcast of the wind-driven flow on the West Florida Shelf for a particular period (11-25 March 1978) that contains the passage of a distinct cold front produces coastal sea-level and current fluctuations that are in reasonable agreement with observations.

ANNO

06/10/1987

.....
ACC 2104
TYPE P
YEAR 1977
AUTH HUANG, W.H.;
TITL CLAY MINERAL STUDIES OF SURFACE SEDIMENTS FROM THE MAFLA OCS BASELINE MONIT
ORING SITES.

BIBL TECHNICAL REPORT. SUBMITTED TO THE BUREAU OF LAND MANAGEMENT,
WASHINGTON, DC. (MAFLA-OCS PROGRAM).
KEYW SEDIMENT CLAY MINERALOGY MAFLA
KAOLINITE

ABST Sediments along six transects of the West Florida Shelf were sampled and analyzed. Clay mineral analysis revealed that kaolinite is the most abundant, followed by chlorite-vermiculite mixed layer which is unique in this area. The distribution pattern of clay minerals is different from that on the Mississippi-Alabama Shelf where smectite predominates and virtually no vermiculite-chlorite mixed layer occurs.

ANNO

06/10/1987

.....
ACC 2326
TYPE P
YEAR 1967
AUTH HUANG, T.C.;GOODELL, H.G.;
TITL SEDIMENTS OF CHARLOTTE HARBOR, SOUTHWESTERN FLORIDA.

BIBL J. SEDIMENT. PETROL. 37(2):449-474.

KEYW CHARLOTTE SEDIMENT CARBONATE
 GRAIN SIZE CIRCULATION

ABST The sediments of Charlotte Harbor were determined to be composed of essentially two components: terrigenous quartz sand and biogenic carbonate detritals. The mean grain size as well as the percentage of the carbonate detritals was determined to increase seaward. The coarse fractions of the sediments were shown to accumulate at the harbor mouth and in the channels, while the finer aggregates became concentrated in the harbor head and lagoons. Two major tidal circulations were shown to shift the sediments. Multivariate nonlinear regression was used to relate the sediment characteristics to their provenance, transportation and depositional environments.

ANNO

06/10/1987

.....
ACC 2421
TYPE P
YEAR 1977
AUTH HUDSON, J.H.;
TITL LONG-TERM BIOEROSION RATES ON A FLORIDA REEF: A NEW METHOD.

BIBL PROCEEDING THIRD INTERNATIONAL CORAL REEF SYMPOSIUM, UNIVERSITY OF
MIAMI, MIAMI, FL.

KEYW MONROE	REEF	GROWTH
SPONGE	CORAL	EROSION

ABST Paired cores from dead *Montastrea annularis* coral heads were analyzed by x-radiographs and estimation of annual growth increments to determine bioerosion rates. Between 1974 and 1976 the average annual rate of coral removal by boring organisms was 0.67 cm, a 350% increase over the period 1970-1974.

The principal boring organisms responsible for primary erosion of the coral heads include 6 sponges: *Siphonodictyoa coralliphagum*, *S. sp.*, *Cliona caribbaea*, *C. vermiforea*, *C. vastifica*, and *C. sp.* Secondary erosion is due to the spotlight parrotfish, *Sparisoma viride*, other scarids, and the long-spined sea urchin, *Diadema antillarum*. A 1 meter high coral head could be completely eroded in 150 years or less, according to extrapolation of measured bioerosion rates.

ANNO

06/10/1987

.....
ACC 2217
TYPE P
YEAR 1971
AUTH HUDSON, J.H.
TITL THE CALICO SCALLOP: FISHERY AND RESEARCH DEVELOPMENTS.

BIBL AM. MALACOL. UNION, INC. BUL., SYMP. COMMER. MAR. MOLLUSCS OF THE U.S. ANNU
. REPT. 1970, P. 27-28.
KEYW CALICO SCALLOP FISHERY SPAWNING
DEVELOPMENT

ABST Geographic areas and physical factors such as temperature and depth limitin
g th e abundance of calico scallops were presented. Methods for commerical
harvesting using an 8 ft tumbler dredge and factors influencing commerical
production were discussed. The use of Remote Underwater Fishery Assessmen
t System (RUFAS) and a towed sled equipped for continuous motion picture or
video tapes of scallop concentrations was also discussed. Biological rese
arch on the calico scallop in such areas as spawning, larval development, &
dispersal, spat set, age, growth, movement, mortality, and environmental f
actors affecting scallop beds were also briefly discussed.

ANNO

06/10/1987

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ACC 2422
TYPE P
YEAR 1981
AUTH HUDSON, J.H.;
TITL GROWTH RATES IN MONTASTRAEA ANNULARIS: A RECORD OF ENVIRONMENTAL CHANGE IN
KEY LARGO CORAL REEF MARINE SANCTUARY, FLORIDA.

BIBL BULL. MAR. SCI. 31(2):444-459.

KEYW MONROE	CORAL	REEF
GROWTH	TEMPERATURE	TURBIDITY
DEPTH	STRESS	

ABST One hundred forty-four massive heads of *Montastraea annularis* from inshore, midshore, and offshore reef areas within the Key Largo Coral Reef Marine Sanctuary, Florida, were sampled by coring to determine annual growth rates. Water temperature, turbidity, and depth appear to be the primary environmental factors regulating growth and survival of *M. annularis*. Maximum growth rates (average 11.2 mm/yr) of *M. annularis* occurred at midshore reef areas where stress banding and skeletal damage due to bioerosion were minimal. *M. annularis* from the offshore fore-reef areas showed the slowest growth rates (6.3 mm/yr) while those from inshore reef areas had a slightly higher rate (8.2 mm/yr). *M. annularis* from both inshore and offshore reef areas exhibited long histories of environmental stress indicated by stress banding and healed-over "die-off" voids excavated by boring organisms. A decrease in coral growth from 1953 to 1968 at some midshore and inshore reefs coincided with increased dredge and fill operations in the Florida Keys area. A recent slight increase in growth (1973-1978) coincided with a ban on these operations.

ANNO

06/10/1987

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ACC 2423

TYPE P

YEAR 1980

AUTH HUDSON, J.H.;ROBBIN, D.M.;

TITL EFFECTS OF DRILLING MUD ON THE GROWTH RATE OF THE REEF-BUILDING CORAL, MONT
ASTRAEA ANNULARIS.

BIBL PROC. RESEARCH ON ENVIRON. FATE AND EFFECTS OF DRILLING FLUIDS AND CUTTINGS
, VOL. II, LAKE BUENA VISTA, FLORIDA.

KEYW MONROE
CORAL

DRILLING MUD
GROWTH

REEF
BARIUM

ABST To study the effects of drilling mud on the growth of *Montastraea annularis*, eight coral heads were heavily dosed with drilling mud and left with 10 untreated corals on Carysfort Reef, Key Largo, for 6 months to recover and grow. After collection and analysis by x-radiography, growth rates were found to be reduced in treated corals and barium levels in skeletal areas as high as 100 times background concentration. In a second study at East Flower Garden Bank, growth rates of *M. annularis* were found to have declined sharply after 1957, but barium and chromium levels were at or below background concentrations, despite nearby drilling operations in 1974 and 1977.

ANNO

06/10/1987

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ACC 2424

TYPE P

YEAR 1970

AUTH HUDSON, J.H.; ALLEN, D.M.; COSTELLO, T.J.;

TITL THE FLORA AND FAUNA OF A BASIN IN CENTRAL FLORIDA BAY.

BIBL U.S. FISH WILDL. SERV. SPEC. SCI. REPT. NO. 604. 14 P.

KEYW MONROE
SALINITY

SEAGRASS
TEMPERATURE

WATER MASS
PINK SHRIMP

ABST Monthly samples collected from a basin of central Florida Bay yielded 196 species of plants and animals between April 1965 and January 1968. Approximately 73% of the organisms were benthic and associated with seagrass beds of *Thalassia testudinum*. A species list is given. The effect of different water masses on the general distribution of fauna and flora in the basin and bay is discussed.

ANNO

06/10/1987

.....
ACC 2425
TYPE P
YEAR 1976
AUTH HUDSON, J.H.;SHINN, F.A.;HALLEY, R.B.;LIDZ, B.H.;
TITL AUTOPSY OF A DEAD CORAL REEF.

BIBL AM. ASSOC. PET. GEOL. 60(4):683.

KEYW MONROE	CORAL	REEF
MORTALTIY	GROWTH	STRESS
TEMPERATURE		

ABST During the winter of 1969-70 Hen and Chickens patch reef in the Florida Keys was determined to have suffered 80 to 90% mortality. It was found through x-radiographed slabs, measurement of annual growth rate and observation of abnormalities dating from 1926 to the present that "stress bands" formed during winter months. The stress bands were found to correspond to unusually cold winters. It was concluded that the death of Hen and Chickens patch reef was caused by uncommonly cold water.

ANNO

06/10/1987

.....
ACC 4169
TYPE P
YEAR 1982
AUTH HUDSON, J.H.; SHINN, E.A.; ROBBIN, D.M.;
TITL EFFECTS OF OFSHORE OIL DRILLING ON PHILIPPINE REEF CORALS.

BIBL BULL. MAR. SCI. 32(4):890-908.

KEYW OFFSHORE DRILLING	CORAL	GROWTH
REEF	PHYSIOLOGY	PATHOLOGY

ABST An offshore drilling site in an area of extensive live coral bottom off northwest Palawan Island, Philippines, was examined 15 mo. after well completion to determine the effects of drilling on coral growth and survival. Core samples of 38 *Porites lutea* head corals were collected from around the drilling site and from a control reef and their histories compared using x-radiography to reveal changes in annual growth before, during, and after drilling. Analysis of *P. lutea* growth rates showed that when compared to their predrilling growth averages and to growth of corals from a nearby control reef, little suspension of head coral growth could be attributed to drilling. Diver observation, together with analysis of sampling transect photomosaics, revealed approximately 70-90% reduction in foliose, branching and plate-like corals in an Fe-stained area that extended out from the wellheads in a 115 times 85 m ellipse. Coral cover beyond this area was comparable to that of the control reef.

ANNO

06/10/1987

.....
ACC 4315

TYPE P

YEAR 1981

AUTH HUDSON, J.H.;

TITL GROWTH RATES IN MONTASTRAEA ANNULARIS: A RECORD OF ENVIRONMENTAL CHANGE IN
KEY LARGO CORAL REEF MARINE SANCTUARY, FLORIDA.

BIBL BULL. MAR. SCI. 31(2):444-459.

KEYW CORAL
DEPTH
STRESS

REEF
TURBIDITY

GROWTH
TEMPERATURE

ABST Annual growth rates of *M. annularis* over the last 50+ years were determined for inshore, midshore, and offshore reef areas within the Key Largo Coral Reef Marine Sanctuary, Florida. Key elements affecting growth and survival of *M. annularis* in the sanctuary appear to be water depth, turbidity, and temperature. Abnormal density layers (stress bands) are common and reveal a record of environmental stress. The recent decline in coral growth (1953 to 1968) at some midshore and inshore reefs coincides with increased dredging and fill operations in the Florida Keys area. A slight overall resurgence in coral growth on these same reefs (1973 to present) coincides with a ban on these operations.

ANNO

06/10/1987

ACC 4064

TYPE P

YEAR 1979

AUTH HUFF, J.A.; COBB, S.P.;

TITL PENAEOID AND SERGESTOID SHRIMPS (CRUSTACEA: DECAPODA). MEMOIRS OF THE HOURGLASS CRUISES. VOL. V, PART IV.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 102 P.

KEYW CRUSTACEA	BIOLOGY	DISTRIBUTION
SYSTEMATIC	ZOOGEOGRAPHY	PINK SHRIMP
HOURLASS	ROCK SHRIMP	BENTHIC
ECOLOGY	INVERTEBRATE	EPIFAUNA
CONTINENTAL SHELF		

ABST Three families of Penaeoidea and 1 genus of Sergestidae were captured during 28 months of systematic sampling on Florida's west central shelf. Penaeoids collected in order of decreasing abundance were *Sicyonia brevirostris*, *Solenocera atlantidis*, *Metapenaeopsis goodei*, *Penaeus duorarum*, *Trachypenaeus constrictus*, *Mesopenaeus tropicalis*, *Sicyonia typica*, *Sicyonia laevigata*, *Sicyonia stimpsoni*, and *Sicyonia burkenroadi*. These species have demonstrable affinities for firm or coarse substrates; penaeoids with soft or fine substrate affinities were not captured in Hourglass sampling. Sergestidae was represented by the planktonic shrimp, *Lucifer faxoni*. Reproductive data revealed a trend toward protracted or year-round spawning and recruitment. Diet analysis revealed eight penaeoids to be generalized benthic carnivores. Nocturnal feeding was indicated for seven; *S. laevigata* had a diel feeding pattern. A key for 26 species of Penaeoidea known from the Gulf of Mexico and Atlantic waters of Florida's east coast (less than 200 m deep) includes *Trachypenaeopsis mobilispinis*, not previously reported from waters contiguous to Florida.

ANNO

06/10/1987

.....
ACC 2357

TYPE P

YEAR 1969

AUTH HUGHES, D.A.;

TITL RESPONSES TO SALINITY CHANGE AS THE TIDAL TRANSPORT MECHANISM OF PINK SHRIMP, PENAEUS DUORARUM.

BIBL BIOL. BULL. MAR. BIOL. LABS., WOODS HOLE. 136(1):43-53.

KEYW COLLIER
PINK SHRIMP
CURRENTS

SALINITY
TIDE

TRANSPORT
LIGHT

ABST Shrimp taken from Buttonwood estuary, Florida were studied to determine the effect of salinity on postlarvae and juveniles. In the laboratory salinity changes were imposed on both juveniles and postlarvae. With a decreasing salinity, the rheotactic response of juveniles was reversed, and postlarvae sank lower in the water column. Postlarvae demonstrated an ability to perceive and avoid areas of lower salinity.

ANNO

06/10/1987

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ACC 4322
TYPE P
YEAR 1979
AUTH HUGHES, P.;
TITL GREAT GALVESTON HURRICANE.

BIBL WEATHERWISE, WASH., D.C., 32(4):148-156.

KEYW HURRICANE

HURRICANE DAMAGE

ABST The 1900 Galveston hurricane was a far greater disaster than the Chicago fire of 1871, which killed 250 people; the 1906 San Francisco earthquake, which killed 480; or the Johnstown flood in 1889, which claimed 2200 lives. In the City of Galveston alone, the hurricane killed at least 6000 people and left 5000 injured. At least 2000 more died elsewhere. The hurricane was born about 4000 mi away from the city, west of the Cape Verde Islands on Aug. 17. On Sept. 5, when the storm struck the Florida Keys, it became a full-blown hurricane. Winds were estimated to be 120 m.p.h. or more. Twelve hurricanes have struck the U.S. since the one that struck Galveston in 1900; one was almost equal in severity and two were more intense--the hurricane that struck the Florida Keys in 1935 and hurricane "Camille," which hit the Gulf coast in 1969.

ANNO

06/10/1987

.....
ACC 24

TYPE

YEAR 1978

AUTH HUH, O.K.;

TITL REMOTE SENSING OF THE OCEANS FROM SPACE -- ACHIEVEMENTS, PROBLEMS AND PROGN
OSIS.

BIBL OFFICE OF NAVAL RESEARCH, ASTRONAUTICS AND AERONAUTICS. TECHNICAL REPORT NO
. 252.

KEYW COASTAL WATER
TEMPERATURE

REMOTE SENSING
OCEANOGRAPHY

SATELLITE

ABST

ANNO

.....
ACC 1035
TYPE
YEAR 1978
AUTH HUH, O.K.;ROUSE L.J.;SMITH, G.W. ;
TITL SURFACE TEMPERATURE AND TEMPERATURE GRADIENT FEATURES OF THE U.S. GULF COAS
T WATERS.

IN: PROCEEDING 11TH INTERNATIONAL SYMPOSIUM ON REMOTE SENSING OF
THE ENVIRONMENT, APRIL 25-29, 1977. 1609-1618 P.
BIBL UNIVERSITY OF MICHIGAN, ANN ARBOR, MI.

KEYW COASTAL WATER CONTINENTAL SHELF INFRARED IMAGERY
PHYSICAL OCEANOGRAPH REMOTE SENSING SATELLITE
SEASONAL VARIATION TEMPERATURE

ABST Satellite thermal infrared data on the Gulf of Mexico show that a seasonal cycle exists in the horizontal surface temperature structure. In the fall, the surface temperatures of both coastal and deep waters are nearly uniform. With the onset of winter, atmospheric cold fronts, which are accompanied by dry, low-temperature air and strong winds, draw heat from the sea. Penetrative convection and wind-driven mixing lower temperatures, first in the shallowest waters and then, as the winter season progresses, in deeper and deeper portions of the Gulf. A band of cooler water forming on the inner shelf expands, until a thermal front develops seaward along the shelf between the cold shelf waters and the warmer deep waters of the Gulf. Digital analysis of the satellite data has been carried out in an interactive mode using a minicomputer and software developed at the Coastal Studies Institute. A time series of temperature profiles illustrates the temporal and spatial changes in the sea-surface temperature field.

ANNO

06/10/1987

.....
ACC 1036

TYPE

YEAR 1981

AUTH HUH, O.K.;WISEMAN W.J.;ROUSE L.J.;

TITL INTRUSION OF LOOP CURRENT WATERS ONTO THE WEST FLORIDA CONTINENTAL SHELF.

BIBL J. GEOPHY. RES. 86:4186-4192.

KEYW LOOP CURRENT	CONTINENTAL SHELF	INFRARED IMAGERY
PHYSICAL OCEANOGRAPH	REMOTE SENSING	SATELLITE
SEASONAL VARIATION	TEMPERATURE	

ABST An intrusion of loop current water up DeSoto Canyon and onto the West Florida continental shelf to within 8 km of the shore occurred in February 1977. Boat, aircraft, and satellite data collected in the area for another purpose were used to estimate the space and time scales of the intrusion and the ultimate fate of the intruded waters. The duration of the event was 18 days. Oceanic waters advanced across the shelf at speeds of 20 cm s⁻¹. At maximum intrusion, 6650 km² of shelf were affected. Approximately half the intruded water receded off the shelf, and half appears to have been modified in situ.

ANNO

06/10/1987

.....
ACC 4265

TYPE P

YEAR 1978

AUTH HUH, O.K.;WISEMAN, W.J., JR.;ROUSE, L.J., JR.;

TITL WINTER CYCLE OF SEA SURFACE THERMAL PATTERNS, NORTHEASTERN GULF OF MEXICO.

PRESENTED AT CHAPMAN CONFERENCE ON OCEANIC FRONTS, NEW ORLEANS, LA (USA)
OCTOBER 1977.

BIBL J. GEOPHYS. RES. 83(C9):4523-5531.

KEYW TEMPERATURE

LOOP CURRENT

SEASONAL

REMOTE SENSING

SATELLITE

INFRARED IMAGERY

ABST During the winter of 1976-1977 a time series of NOAA satellite data was obtained which documented the seasonal cycle of sea surface temperature. Data were obtained as both marine-enhanced images and computer compatible tapes. Fall cooling initially affected only the lakes and estuaries. A band of cold inner shelf waters then formed along the coast. This expanded seaward to the shelf break as the winter season progressed. At the extreme of winter cooling, two major thermal fronts remained: one near the shelf edge, separating the shelf from deep gulf surface waters, and the other the cyclonic boundary of the Loop Current. The onset of spring warming was indicated by an increase in surface temperatures in the shallow inshore areas. The seasonal cycle was completed with the formation of nearly isothermal surface waters throughout the region, a condition characteristic of the summer season.

ANNO

06/10/1987

.....
ACC 2105
TYPE P
YEAR 1958
AUTH HULINGS, N.C.;
TITL AN ECOLOGICAL STUDY OF THE RECENT OSTRACODS OF THE GULF COAST OF FLORIDA.

BIBL PH.D. DISSERTATION. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL. 224 P.

KEYW BENTHIC	TEMPERATURE	SALINITY
HYDROGRAPHIC	CRUSTACEA	CURRENTS
TURBIDITY		

ABST The distribution of ostracods on the Gulf coast of Florida was determined from 165 benthic samples taken from Ochlockonee Bay, Apalachee Bay, and an offshore transect from Panama City to St. Petersburg. A total of 83 species was collected, 47 of which were identified to species. The temperature, salinity, and bottom type conditions of all sampling areas were measured and various biozones were distinguished on the basis of substratum type and species composition. The distribution of living ostracods was related to the measured hydrographic conditions.

ANNO

06/10/1987

.....
ACC 375
TYPE
YEAR 1959
AUTH HUMM, H.J.;DARNELL, R.M.;
TITL A COLLECTION OF MARINE ALGAE FROM THE CHANDELEUR ISLANDS.

BIBL PUBL. INST. MAR. SCI., UNIV. TEX. 6:265-276.

KEYW ALGAE	BENTHIC FLORA	BIOLOGY
ECOLOGY	SPECIES LIST	FLORA
TAXONOMY		

ABST

ANNO

06/10/1987

.....
ACC 2106
TYPE
YEAR 1973
AUTH HUMM, H.J.;
TITL SEAGRASSES.

IN: A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO. J.J. JONES,
R.E. RING, M.O. RINKEL AND R.E. SMITH (EDS.).

BIBL STATE UNIVERSITY SYSTEM FLORIDA INSTITUTE OF OCEANOGRAPHY, ST.
PETERSBURG, FL. IIIC-1-IIIC-10.
KEYW SEAGRASS DEPTH

ABST The eastern Gulf of Mexico supports five species of seagrass, representing 4 genera, in abundance. *Thalassia testudinum* (turtle grass); *Holodule wrightii* (manatee grass); and *Syringodium filiforme* (shoal grass) are the most abundant species, occurring in shallow inshore areas, intertidally to depths of 10-20 meters. Two other species, *Halophila baillonis* and *H. engelmannii* also occur in shallow waters, but their distribution extends to depths of 70 meters. These seagrasses occupy thousands of square miles of the inner continental shelf, providing habitat for many invertebrate and fish populations.

ANNO

06/10/1987

.....
ACC 2107

TYPE P

YEAR 1973

AUTH HUMM, H.J.;

TITL BENTHIC ALGAE OF THE EASTERN GULF OF MEXICO.

IN: A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.
J. JONES, R. RING, M. RINKEL AND R. SMITH (EDS.).

BIBL STATE UNIVERSITY SYSTEM FLORIDA INSTITUTE OF OCEANOGRAPHY.
IIIB-1-IIIB-15.

KEYW BENTHIC
SEAGRASS

ALGAE
ABUNDANCE

BIOMASS

ABST The diversity and abundance of benthic algae in the eastern Gulf of Mexico is reviewed. The regional scarcity of rocky substrata is cited in limiting the abundance of the epibenthic flora. Biomass comparisons are drawn between benthic algae and seagrasses. Commercial uses of the native algae are summarized and the feasibility of harvesting seaweed from the continental shelf is discussed.

ANNO

06/10/1987

.....
ACC 4182
TYPE P
YEAR 1979
AUTH HURDEY, S.E.;
TITL SOURCES AND CHARACTERISTICS OF LIQUID PROCESS WASTES FROM ARCTIC OFFSHORE H
YDROCARBON EXPLORATION.

BIBL ARCTIC 32(1):3-21.

KEYW POLLUTION DRILLING MUD OFFSHORE DRILLING
 FORMATION WATER PRODUCTION WATER

ABST Increased interest in offshore hydrocarbon exploration in Arctic waters raises concern regarding liquid waste management from drilling operations. The typical sources of process liquid waste from exploratory drilling operations is described and data on the quantity and quality of liquid waste discharged is provided from monitoring at two offshore sites. The chemical and toxicological characteristics of the waste fluids indicate that a potential exists for water pollution in specific circumstances. However, close process control to reduce the quantities of waste fluid generated and judicious selection of drilling mud additives should prevent the occurrence of significant water pollution problems from waste fluid disposal at exploratory Arctic offshore drilling operations.

ANNO

06/10/1987

.....
ACC 4065
TYPE P
YEAR 1980
AUTH HURLBURT, H.E.; THOMPSON, J.D.;
TITL A NUMERICAL STUDY OF LOOP CURRENT INTRUSIONS AND EDDY SHEDDING.

BIBL J. PHYS. OCEANOGR. 10(10):1611-1651.

KEYW CIRCULATION	CURRENTS	EDDY FORMATION
LOOP CURRENT	NUMERICAL MODEL	PHYSICAL
OCEANOGRAPHY	INTRUSION	

ABST The dynamics of the eddy shedding by the Loop Current in the Gulf of Mexico have been investigated using three nonlinear numerical models: two-layer, barotropic and reduced gravity. The barotropic and reduced gravity models demonstrate the individual behavior of the external and internal modes, and provide insight into how they interact in the two-layer model. Because of the economy of the semi-implicit free surface models, it was possible to perform over 100 experiments to investigate the stability properties of the Loop Current. Typically, the models were integrated 3-5 years to statistical equilibrium on a 1600 km x 900 km rectangular domain with a resolution of 20 km x 18.75 km. Prescribed inflow through the model Yucatan Channel was compensated by outflow through the Florida Straits.

ANNO

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ACC 4066

TYPE P

YEAR 1973

AUTH ICHIYE, T.; KUO, H.; CARNES, M.R.;

TITL ASSESSMENT OF CURRENTS AND HYDROGRAPHY OF THE EASTERN GULF OF MEXICO.

BIBL CONTRIBUTION NO. 106, DEPARTMENT OF OCEANOGRAPHY. TEXAS A&M
UNIVERSITY, COLLEGE STATION, TX.

KEYW	PHYSICAL	OCEANOGRAPHY	HYDROGRAPHY
	CIRCULATION	LOOP CURRENT	SEASONALITY
	METEOROLOGY	CURRENTS	

ABST The main purpose of the study was to review existing information on currents and hydrography of the eastern Gulf and to present the results in a manner useful to those interested either in basic sciences or in their applications to this area. Sources of information were obtained from publications including scientific journals and technical reports by governmental agencies, academic institutions and industrial laboratories as well as from unpublished materials including data files, data cards, charts and tables. Although no original research was intended initially, it developed that various new analyses of existing data became necessary in order to present the results of study in useful forms. For instance, the surface currents and transports for each month had to be computed by use of the surface wind stresses, and charts for distributions of water properties were prepared from raw hydrographic data. In the near shore area, temperature-salinity relationships were prepared for different estuaries from scattered sources. Tidal flushing of Tampa Bay and Charlotte Harbor was calculated based on new sets of data. Circulation and sea level changes in a rectangular ocean by a moving storm were numerically evaluated and applied to the Gulf of Mexico. The sea level changes along the Gulf coast due to hurricanes were processed and analyzed by use of data cards and computer print-outs provided by Mr. Douglas Martin of NOAA/NOS. Further, an annotated bibliography was prepared by checking each reference available at our working collection and main library.

ANNO

06/10/1987

.....
ACC 2020
TYPE P
YEAR 1957
AUTH IDYLL, C.P.;
TITL THE COMMERCIAL SHRIMP INDUSTRY OF FLORIDA.

BIBL FLORIDA BOARD OF CONSERVATION MARINE LABORATORY EDUCATIONAL
SERIAL NUMBER 6. 30 P.

KEYW SHRIMP	LIFE HISTORY	FISHERY
DEVELOPMENT	DISTRIBUTION	PINK SHRIMP
BROWN SHRIMP	SOCIOECONOMICS	SHRIMP FISHERY

ABST This review of the commercial shrimp industry of Florida examines the life history of penaeid shrimp, the shrimp industry, and regulations concerning the fishery. Three commercially important shrimp species, *Penaeus duorarum*, *P. setiferus*, and *P. aztecus* are described and their individual importance to the fishery is assessed. The spawning and development of *P. setiferus*, which is typical of other penaeids, are summarized. The distribution of shrimp, fishing gear and methods, economic value of the shrimp industry, and aspects of handling, shipping, and processing shrimp are discussed. Present fishery regulations are presented and the necessity of analyzing population data before making future management decisions is cited.

ANNO

06/10/1987

.....

ACC 1085

TYPE

YEAR 1965

AUTH INAMOTO, T.;

TITL SUMMARY OF TUNA OBSERVATIONS IN THE GULF OF MEXICO ON CRUISES OF THE EXPLOR
ATORY FISHING VESSEL OREGON, 1950-1963.

BIBL COMM. FISH. REV. 27(1):7-14.

KEYW BIOLOGY
FISHERY

COMMERCIAL FISHERY FISH
ZOOLOGY

ABST

ANNO

06/10/1987

.....
ACC 2021

TYPE P

YEAR 1963

AUTH INGLE, R.M.; ELDRED, B.; SIMS, H.W.; ELDRED, E.A.;

TITL ON THE POSSIBLE CARIBBEAN ORIGIN OF FLORIDA'S SPINY LOBSTER POPULATIONS.

BIBL FLORIDA STATE BOARD CONSERVATION MARINE LABORATORY, TECHNICAL
SERVICES NO. 40. 12 P.

KEYW SPINY LOBSTER

CURRENTS

LARVAE

DISTRIBUTION

CRUSTACEA

ABST The possibility of Caribbean water currents transporting larval spiny lobsters (*Panulirus argus*) to Florida is investigated. Previous research has documented the larval developmental period of *P. argus* at 150 to 180 days, allowing long distance transport and a wide distribution. Studies of the adult breeding season and the Caribbean distribution of larvae are cited. A review of published water current patterns suggested that Caribbean currents may be important in seeding spiny lobster beds in the Florida Keys and the mainland peninsula. Summer Caribbean currents flow through the Yucatan Straits into central northern Gulf of Mexico; records of tropical fish fauna in Louisiana and northern Florida provide evidence for this transport. Plankton sampling of 22 stations between Key West and the Yucatan Straits established that spiny lobster larvae emanate from south of the straits. Further sampling and analysis of other plankton samples was continuing to determine the geographical distribution and source of *P. argus* larvae.

ANNO

06/10/1987

.....
ACC 2046
TYPE P
YEAR 1959
AUTH INGLE, R.M.;ELDRED, B.;JONES, H.;HUTTON, R.F.;
TITL PRELIMINARY ANALYSIS OF TORTUGAS SHRIMP SAMPLING DATA, 1957-58.

BIBL FLORIDA STATE BOARD CONSERVATION MARINE LABORATORY, TECHNICAL
SERVICES NO. 32. 45 P.

KEYW POPULATION DYNAMICS REPRODUCTION MIGRATION
POPULATION CRUSTACEA PINK SHRIMP

ABST Twelve stations in the Tortugas shrimping grounds were trawled weekly from November 1957 to October 1958 to examine the population dynamics of the area's commercial shrimp. Numerically, *Penaeus duorarum*, composed 65% of the shrimp population; the next most abundant species was *Trachypenaeus* sp., comprising 23% of the population. Extensive data is presented on shrimp size, abundance, reproduction, and migration. A nursery area for young *P. duorarum* was suspected south of the sampling stations. Recommendations for the protection of the local shrimp population are made in light of the findings.

ANNO

06/10/1987

.....

ACC 2548
TYPE P
YEAR 1968
AUTH INGLE, R.M.;WITHAM, R.;
TITL BIOLOGICAL CONSIDERATIONS IN SPINY LOBSTER CULTURE.

BIBL PROC. GULF & CARIBB. FISH. INST. 21:158-162.

KEYW LIFE HISTORY SPINY LOBSTER ARTIFICIAL HABITAT

ABST The life history of the Florida spiny lobster, *Panulirus argus*, and its potential for mariculture are reviewed. Attempts to culture postlarvae in artificial habitats in St. Lucie estuary and at Key West, Florida attained consistent results. Cultivation methods and possible problems are discussed.

ANNO

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ACC 316
TYPE
YEAR 1975
AUTH IRBY, B.N.;MCCAUGHAN, D.;
TITL GUIDE TO THE MARINE RESOURCES OF MISSISSIPPI.

BIBL FOX PRINTING COMPANY, HATTIESBURG, MS. 359 PP.

KEYW BIOLOGY	COASTAL ZONE	ESTUARY
FISHERY	GEOLOGY	PHYSICAL PROCESS
POLLUTION	WILDLIFE	RESOURCE

ABST The report was written to provide a unity of information about the Mississippi marine resources for use personally and scientifically. It is divided into three main sections. The first section deals mostly with the physical aspects of the Mississippi coastal area. The geology of the area, the Barrier Islands, the plant life, the estuarine ecosystem, and the effects of pollution in the Mississippi Sound are all covered. The second section deals with the different commissions, councils, and laboratories in this area. Some examples are the Mississippi Air and Water Pollution Control Commission, Environmental Protection Agency, and the Gulf Coast Research Laboratory. In the third section, the Coastal Wetlands Protection Law is given, the ports and harbors of coastal Mississippi are listed, a history and discussion of various aspects of the seafood industry is given and finally, information for teaching marine science in schools is outlined.

ANNO

06/10/1987

.....
ACC 4067

TYPE P

YEAR 1981

AUTH IRVINE, A.B.;CAFFIN, J.E.;KOCHMAN, H.I.;

TITL AERIAL SURVEYS FOR MANATEES AND DOLPHINS IN WESTERN PENINSULAR FLORIDA (WITH NOTES ON SIGHTINGS OF SEA TURTLES AND CROCODILES).

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, DC. FWS/OBS-80/50. 20 P.

KEYW AERIAL SURVEY	DISTRIBUTION	DOLPHIN
ENDANGERED SPECIES	MANATEE	MAMMAL
TURTLE	BIOLOGY	COASTAL

ABST Low altitude aerial surveys were conducted at approximately monthly intervals from August to December 1979 to count West Indian manatees (*Trichechus manatus*) and bottlenose dolphins (*Tursiops truncatus*) in western peninsular Florida. Sightings of sea turtles, turtle tracks, and a crocodile were also noted. A total of 554 manatees was observed in 297 groups. Fifty-eight percent of the manatees were sighted in the Collier-Monroe Counties area in shallow, brackish inshore areas. A total of 1,383 bottlenose dolphins was observed in 431 herds, including 700 (in 146 herds) in the Gulf of Mexico, 491 (in 185 herds) in bays, and 192 (in 100 herds) in marsh-river habitats. Fifty-eight sea turtles (including 45 loggerheads, *Caretta caretta*) and 30 sets of turtle tracks were counted. One crocodile, probably *Crocodilus acutus*, was sighted in the Everglades National Park.

ANNO

06/10/1987

.....
ACC 4068
TYPE P
YEAR 1982
AUTH IRVINE, A.B.;CAFFIN, J.E.;KOCHMAN, H.I.;
TITL AERIAL SURVEYS FOR MANATEES AND DOLPHINS IN WESTERN PENINSULAR FLORIDA.

BIBL FISH. BULL. 80(3):621-630.

KEYW AERIAL SURVEY	BIOLOGY	DISTRIBUTION
DOLPHIN	MANATEE	MAMMAL
ENDANGERED SPECIES	COASTAL	

ABST Low-altitude aerial surveys were conducted to count West Indian manatees, *Trichechus manatus*, and bottlenose dolphins, *Tursiops truncatus*, in western peninsular Florida. A total of 554 manatees was observed in 297 groups. Most of the manatees (58.5%) were sighted in the Collier-Monroe Counties in shallow, brackish inshore areas. A total of 1,383 bottlenose dolphins was observed in 431 herds, including 700 (in 146 herds) in the Gulf of Mexico, 491 (in 185 herds) in bays, and 192 (in 100 herds) in marsh-river habitats.

ANNO

06/10/1987

.....
ACC 2047

TYPE P

YEAR 1960

AUTH IVERSON, E.S.; IDYLL, C.P.;

TITL ASPECTS OF THE BIOLOGY OF THE TORTUGAS PINK SHRIMP, PENAEUS DUORARUM.

BIBL TRANS. AM. FISH. SOC. 89(1).

KEYW BIOLOGY

MIGRATION

TEMPERATURE

PINK SHRIMP

TAGGING

SALINITY

GROWTH

CRUSTACEA

ABST A one year survey of the pink shrimp, *Penaeus duorarum* from the Tortugas grounds off southern Florida yielded information on size frequency, growth, and migration. Female and male pink shrimp had an estimated winter growth of 5 and 7 counts per pound (number of shrimp per pound with heads off), respectively. Tagging studies indicated that adult shrimp generally migrate in a northwest direction. Maximum size of females was greater than that of males. Carapace length was directly related to total length. Using size frequency distributions, small shrimp were found to move into the Tortugas grounds from Florida Bay.

ANNO

06/10/1987

.....
ACC 2048

TYPE P

YEAR 1961

AUTH IVERSON, E.S.; JONES, A.C.;

TITL GROWTH AND MIGRATION OF TORTUGAS PINK SHRIMP, PENAEUS DUORARUM, AND CHANGES
IN THE CATCH PER UNIT OF EFFORT OF THE FISHERY.

BIBL FLORIDA STATE BOARD CONSERVATION MARINE LABORATORY TECHNICAL SERVICE
NO. 34. 28 P.

KEYW MIGRATION

PINK SHRIMP

GROWTH

ABST The growth and migratory behavior of tagged pink shrimp, *Penaeus duorarum*, were studied. The average rate of recovery of tagged shrimp was about 10 percent. Little apparent difference was seen between winter and summer growth rates. Considering both sexes together, small shrimp (67 count or 25 mm carapace length) increased about 10-11 count per month; medium shrimp (33 count or 33 mm carapace length) increased about 2-3 counts per month; and large shrimp (20 count or 40 mm carapae length) increased about 0-1/2 count per month. On the fishing grounds, tagged shrimp were found to move about 5 miles per day and in all directions from the point of release. The majority moved to deeper water in a northwesterly direction. Despite increased fishing effort, the trend line of total production was determined to be approximately level. The catch per boat night has declined over the years 1950-1959.

ANNO

06/10/1987

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ACC 4069

TYPE P

YEAR

AUTH IVERSON, R.L.;BITTAKER, H.F.;

TITL SEAGRASS DISTRIBUTION AND ABUNDANCE IN EASTERN GULF OF MEXICO COASTAL WATER S.

BIBL EST. COAST. SHELF SCI.

KEYW SEAGRASS
BENTHIC
ECOLOGY

BIOMASS
EPIFLORA
COASTAL

DISTRIBUTION
BIOLOGY

ABST The marine angiosperms *Thalassia testudinum*, *Syringodium filiforme*, and *Halodule wrightii* form two of the largest reported seagrass beds along the northwest and southern coasts of Florida where they cover about 3,000 square km in the Big Bend area and about 5,500 square km in Florida Bay, respectively. Most of the leaf biomass in the Big Bend area and outer Florida Bay was composed of *Thalassia testudinum* and *Syringodium filiforme* which were distributed throughout the beds but which were more abundant in shallow depths. A short-leaved form of *Halodule wrightii* grew in monotypic stands in shallow water near the inner edges of the beds, while *Halophila decipiens* and a longer-leaved variety of *H. wrightii* grew scattered throughout the beds, in monotypic stands near the outer edges of the beds, and in deeper water outside the beds. *Halophila engelmanni* was observed scattered at various depths throughout the seagrass beds and in monospecific patches in deep water around river mouths. *Ruppia maritima* grew primarily in brackish waters outside the northern bed. The cross-shelf limits of the two major seagrass beds are controlled nearshore by increased water turbidity and lower salinity around river mouths and offshore by light penetration to depths which receive 10 percent or more of sea surface photosynthetically active radiation. Seagrasses form large beds only along low energy reaches of the coast.

ANNO

06/10/1987

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ACC 1073
TYPE
YEAR 1979
AUTH IVESTER, S.;
TITL CHAPTER 13. BENTHIC MEIOFAUNA. IN THE MISSISSIPPI, ALABAMA, FLORIDA OUTER
CONTINENTAL SHELF BASELINE ENVIRONMENTAL SURVEY, 1977/1978.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C.

KEYW FLORIDA BENTHIC COMMUNITY BENTHOS
 BIOLOGY COMMUNITY STRUCTURE MEIOFAUNA
 MAFLA

ABST Meiofauna density in the eastern Gulf of Mexico-MAFLA region are in the range for densities from other parts of the world. Marine free-living nematodes comprised 70.3%. Density was highest in shallow inshore waters and decreased to lowest values in depth > 100 m. An inshore density depression is evident south of Mobile Bay where large river inputs seemed to reduce meiofauna density. Meiofauna densities peak in moderate to high carbonate, medium to fine sands. Association patterns between and within stations, and between seasons do not show any definite trends. Correlations between taxonomic and physical parameters are nonexistent or weak. This is due probably to the limited taxonomic identification. Thirty families of marine free-living nematodes were described from nine selected stations. All are indicative of sandy habitats. Some general reports are records for the North American continent.

ANNO

06/10/1987

.....
ACC 2428
TYPE P
YEAR 1979
AUTH JAAP, W.C.;
TITL OBSERVATIONS ON ZOOXANTHELLAE EXPULSION AT MIDDLE SAMBO REEF, FLORIDA KEYS.

BIBL BULL. MAR. SCI. 29(3):414-422.

KEYW MONROE	CORAL	REEF
TEMPERATURE	TIDE	WEATHER
STRESS	ALGAE	WIND

ABST Large scale discoloration of corals at Middle Sambo Reef, 7.8 km from Boca Chica Key, Monroe County, Florida was investigated on September 26, 1973. The hydrozoan coral *Millepora complanata* displayed the greatest discoloration, though some *Acropora palmata*, *Montastraea annularis* and *Palythoa* sp. colonies were mildly discolored. Discoloration of organisms was generally limited to the reef flat. Affected corals were still viable. High air temperatures and mid day low tides combined with calm weather are believed to have elevated water temperature sufficiently to incur thermal stress, thereby causing expulsion of endosymbiotic algae, *Gymnodinium microadriaticum*, with consequent discoloration of coral hosts. Most polyps regained normal color within 6 weeks. The shallow reef cnidarian communities appear to suffer no permanent effect due to short periods of thermal stress. Similar incidents of coral discoloration are reviewed.

ANNO

06/10/1987

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ACC 2429
TYPE P
YEAR 1975
AUTH JAAP, W.C.;WHEATON, J.;
TITL OBSERVATIONS ON FLORIDA REEF CORALS TREATED WITH FISH-COLLECTING CHEMICALS.

BIBL FLA. MAR. RES. PUBL. 10. 18 P.

KEYW MONROE	REEF	CORAL
SCLERACTINIA	TEMPERATURE	SALINITY
DO	POLLUTANT	

ABST Twenty-one species of reef corals (11 Scleractinia, 10 Octocorallia) from Western Sambo Reef, south of Boca Chica Key, Florida were treated with fish collecting chemicals and examined 5 times between August 1973 and June 1974 for deleterious effects. The chemicals used were 100% acetone, a quinaldine/acetone/seawater solution, a commercial rotenone derivative/seawater solution, and undiluted rotenone derivative. No octocorals were damaged by any of the chemicals. Some individuals of 6 scleractinian species (*Acropora palmata*, *A. cervicornis*, *Siderastrea siderea*, *Diploria strigosa*, *Colpophyllia natans*, *Dichocoenia stokesi*) suffered severe damage by the undiluted rotenone derivative. Little or no damage occurred to other scleractinia from any of the chemicals. The reactions of other reef-dwelling organisms to these chemicals are described.

ANNO

06/10/1987

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ACC 4070
TYPE P
YEAR 1984
AUTH JAAP, W.C.;
TITL THE ECOLOGY OF THE SOUTH FLORIDA CORAL REEFS: A COMMUNITY PROFILE.

BIBL U.S. FISH AND WILDLIFE SERVICE FWS/OBS-82/08. 138 P.

KEYW	BIOLOGY	GEOLOGY	ECOLOGY
	MANAGEMENT	REEF	BENTHIC
	REEF FISH		

ABST An overview of coral reef research in southern Florida is provided as a prelude to a genuine description of the coral reef ecosystem in the Florida Keys and surrounding environments. Coral reef community types, reef benthos, plankton and reef fish are given specific treatment. Coral reef ecology and management are described.

ANNO

06/10/1987

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ACC 4213

TYPE P

YEAR 1978

AUTH JACKSON, W.B.; BAXTER, K.N.; CAILLOUET, C.W.;

TITL ENVIRONMENTAL ASSESSMENT OF THE BUCCANEER OIL AND GAS FIELD OFF GALVESTON,
TEXAS: AN OVERVIEW.

BIBL IN: PROC. 10TH ANNU. OFFSHORE TECH. CONF. 1:277-284.

KEYW POLLUTANT
FISH
COMMUNITIES

SEDIMENT
CRUSTACEAN
OIL SPILL

ICHTHYOPLANKTON
SHRIMP

ABST In 1975, the Galveston Laboratory of the National Marine Fisheries Service (NMFS) was given responsibilities for project management of a comparative environmental assessment of an active oil and gas field in the northwestern Gulf of Mexico. The Buccaneer Oil and Gas Field was selected as the study area because it has been in development and production since 1960, thus allowing ample time for the development of oilfield-associated marine communities. Present studies in this field are determining the concentration of pollutants in major components of the marine ecosystem, including water, sediment, suspended particulate matter, ichthyoplankton, sessile organisms, pelagic finfishes, and demersal finfishes and macro-crustaceans. Effects of oilfield discharge effluents are being assessed by acute and chronic effects of bioassays on shrimp and fishes, by observing alteration of composition and abundance of biotic communities, and by investigating accumulation of contaminants in biotic and abiotic components of the ecosystem. Special attention is being given to food web dynamics and to physicochemical modes of transport of pollutants into and away from the marine ecosystem in the field.

ANNO

06/10/1987

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ACC 4279
TYPE P
YEAR 1979
AUTH JACKSON, W.B.;
TITL ENVIRONMENTAL ASSESSMENT OF AN ACTIVE OIL FIELD IN THE NORTHWESTERN GULF OF
MEXICO, 1977-1978. VOL. II. DATA MANAGEMENT AND BIOLOGICAL INVESTIGATIONS.
ANNU. REPT.

BIBL NATIONAL MARINE FISHERIES SERVICE, GALVESTON, TX. 799P.

KEYW OIL	BIOLOGICAL	CHEMICAL
PHYSICAL	ECOSYSTEM	POLLUTANT

ABST To obtain information concerning the environmental consequences of increased development of the outer continental shelf in the Gulf of Mexico, major research efforts are being made to document environmental conditions before, during, and after oil and gas production, and transmission. Among these efforts is the Environmental Assessment of the Buccaneer Oil and Gas Field. Objectives of the project are: (1) to identify and document the types and extent of biological, chemical and physical alterations of the marine ecosystem associated with Buccaneer Oil Field, (2) to determine specific pollutants, their quantity and effects, and (3) to develop the capability to describe and predict fate and effects of Buccaneer Oil Field contaminants.

ANNO

06/10/1987

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ACC 2265

TYPE P

YEAR 1983

AUTH JENSEN, P.R.; GIBSON, R.A.;

TITL PRIMARY PRODUCTION IN THREE SUBTROPICAL SEAGRASS COMMUNITIES: A COMPARISON
OF FOUR AUTOTROPHIC COMPONENTS.

BIBL FLA. SCI. 46(SUPPL. 1):16.

KEYW SEAGRASS

ALGAE

PHYTOPLANKTON

PRIMARY PRODUCTIVITY

ABST Primary production rates of seagrass, associated epiphytic flora, microbenthic algae, and phytoplankton were compared from seagrass communities in Tampa Bay and Indian River, Florida, and Little Bahama Bank. Phytoplankton were found to be the major annual producers in Tampa Bay and the Indian River (87% and 93%, respectively), whereas annual production in Little Bahama Bank was primarily due to seagrass and their epiphytes (71% total).

ANNO

06/10/1987

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ACC 4071

TYPE P

YEAR 1985

AUTH JOHN E. CHANCE & ASSOCIATES, INC.;

TITL PHOTODOCUMENTATION SURVEY OF BLOCK 622 (OCS-G-4950), CHARLOTTE HARBOR AREA,
OFFSHORE FLORIDA, CONDUCTED ON 6-12-85 AND 6-11-85.

BIBL A REPORT FOR SHELL OFFSHORE INC., NEW ORLEANS, LA.

KEYW BIOLOGY

BENTHIC

EPIBIOTA

LIVE BOTTOM

PHOTODOCUMENTATION

REMOTE SENSING

ABST A photodocumentation survey of Charlotte Harbor Lease Block 622 was conducted using a remotely operated vehicle equipped with video and still cameras.

The area was characterized by a coralline algal substrate, which supported numerous epifaunal invertebrates and fishes. In the western portion of the survey area, hard/live bottom areas were observed. These low relief areas supported a deep reef assemblage of tropical affinities.

ANNO

06/10/1987

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ACC 4072

TYPE P

YEAR 1985

AUTH JOHN E. CHANCE & ASSOCIATES, INC.;

TITL PHOTODOCUMENTATION SURVEY OF BLOCKS 623 (OCS-G-4951), 667 (OCS-G-4954), AND
711 (OCS-G-4958), CHARLOTTE HARBOR AREA, OFFSHORE FLORIDA, CONDUCTED ON JU
NE 6-8 1985 AND JUNE 11-12, 1985.

BIBL A REPORT FOR SHELL OFFSHORE INC., NEW ORLEANS, LA.

KEYW BIOLOGY

BENTHIC

EPIBIOTA

LIVE BOTTOM

EPIFLORA

PHOTODOCUMENTATION

REMOTE SENSING

ABST Photodocumentation surveys were conducted in three Charlotte Harbor Lease B
locks off southwest Florida using a remotely operated vehicle equipped with
video/still camera systems. No hard bottom areas were found during the ph
otodocumentation survey of proposed well sites in blocks 623, 667, and 711.

The predominant bottom type encountered consisted of a sand and shell has
h substrate overlain with epibenthic algae. The second bottom type observe
d was sandy substrate covered with coralline algal nodules. Within each le
ase block, various fishes and macroinvertebrates (sessile and mobile) assoc
iated with these substrates were identified from the photographs and video.

ANNO

06/10/1987

.....
ACC 4073
TYPE P
YEAR 1983
AUTH JOHNSON, A.G.;
TITL AGE AND GROWTH OF YELLOWTAIL SNAPPER FROM SOUTH FLORIDA.

BIBL TRANS. AM. FISH. SOC. 112:173-177.

KEYW BIOLOGY	FISH	COMMERCIAL FISHERY
LIFE HISTORY	SNAPPER	REEFFISH

ABST Age and growth of yellowtail snapper *Ocyurus chrysurus* from south Florida were determined from otolith cross-sections. The oldest fish was 14 years old (443-mm at the end of year 1 to 429 mm at the end 14. The von Bertalanffy equation for 802 yellowtail snapper aged 10 or less was $L \text{ SUB } t = 450.9(1 - e^{-0.279(t+0.355)})$, where L = fork length (mm) and t = years. The length-weight relationship was $W = 6.13 \times 10^{-5} L^{2.76}$, where W = weight (g).

ANNO

06/10/1987

.....
ACC 2022
TYPE P
YEAR 1934
AUTH JOHNSON, F.F.;LINDNER, M.J.;
TITL SHRIMP INDUSTRY OF THE SOUTH ATLANTIC AND GULF STATES.

BIBL U.S. BUR. FISH. INVEST. REP. 21-83 P.

KEYW SHRIMP

FISHERY

FISHING GEAR

ABST The shrimp fishery of the south Atlantic and Gulf states is reviewed. The methods and gear, economics, and catch statistics are discussed.

ANNO

06/10/1987

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ACC 422

TYPE

YEAR 1980

AUTH JOHNSON, P.G.;

TITL SEASONAL VARIATION IN BENTHIC COMMUNITY STRUCTURE IN MOBILE BAY, ALABAMA.

BIBL MASTER'S THESIS. UNIVERSITY OF ALABAMA IN BIRMINGHAM, BIRMINGHAM, AL. 118 P
P.

KEYW BENTHIC COMMUNITY
SEASONAL VARIATION

BIOLOGY
SEDIMENT

MACROFAUNA
SEASONALITY

ABST

ANNO

06/10/1987

.....
ACC 2108
TYPE P
YEAR 1981
AUTH JOHNSON, P.G.;
TITL STANDARDIZATION OF IDENTIFICATIONS OF BENTHIC POLYCHAETOUS ANNELIDS FROM THE GULF OF MEXICO OUTER CONTINENTAL SHELF.

BIBL AM. ZOOL. 21(4):223. (ABSTRACT)

KEYW BENTHIC	POLYCHAETE	DISTRIBUTION
HABITAT	BIOLOGY	ECOLOGY
ZOOGEOGRAPHY		

ABST This abstract reports on the preparation of a manual for the identification and distribution of polychaetes collected on the outer continental shelf of the Gulf of Mexico. Included will be taxonomic keys and descriptions for more than 600 species representing 296 genera in 58 families, illustrations of diagnostic features, distributional maps, and habitat information for each species. Described in the introduction will be the geographical setting, materials and methodology, terminology and techniques used in polychaete identifications, and general information on the biology, ecology and zoogeography of polychaetes from the Gulf of Mexico. This publication will provide a common, comparable taxonomic basis for benthic macroinfaunal studies. (Anticipated completion date is September 1983).

ANNO

06/10/1987

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ACC 2109

TYPE P

YEAR 1983

AUTH JOHNSON, P.G.;UEBELACKER, J.M.;

TITL ECOLOGICAL CHARACTERIZATION OF MACROFAUNAL COMMUNITIES OF THE EASTERN GULF
OF MEXICO.

BIBL PRESENTED AT BENTHIC ECOLOGICAL MEETING, FLORIDA INSTITUTE OF
TECHNOLOGY, MELBOURNE, FL.

KEYW BENTHIC
COMMUNITY

POLYCHAETE
SEDIMENT

CRUSTACEAN
ASSEMBLAGE

ABST Benthic macroinfaunal polychaetes and crustaceans were sampled at 107 stations on the Mississippi, Alabama, and western Florida outer continental shelf from June 1975 to February 1978. A total of 204,414 individuals were collected, representing approx. 600 polychaete species in 60 families and 360 crustacean species in 88 families. Trends in community structure and composition were identified and examined in terms of relevant environmental parameters. Animal/sediment relationships, feeding types and general zoogeographical affinities among the polychaete-crustacean assemblages were discussed.

ANNO

06/10/1987

.....
ACC 2551
TYPE P
YEAR 1982
AUTH JOHNSON, R.O.;
TITL THE EFFECTS OF DREDGING ON OFFSHORE BENTHIC MACROFAUNA SOUTH OF THE INLET A
T FORT PIERCE, FLORIDA.

BIBL MASTER'S THESIS. FLORIDA INSTITUTE OF TECHNOLOGY. MELBOURNE, FL.
137 P.

KEYW DIVERSITY	TEMPERATURE	SALINITY
TURBIDITY	DISSOLVED OXYGEN	BENTHIC
COMMUNITY	ABUNDANCE	INVERTEBRATE
SEDIMENT	GRAIN SIZE	DREDGING

ABST The effects of offshore dredging at Ft. Pierce inlet, Florida on benthic macrofaunal communities was investigated between November 1981 and August 1982. Four transects (2 dredged sites; 2 control sites) were sampled trimonthly with a Smith-McIntyre grab to determine species number, evenness, diversity, and species composition. Temperature, salinity, turbidity, and dissolved oxygen were monitored at all stations. Comparison of benthic communities at dredged and control sites revealed that diversity, species richness and evenness, and abundance, all returned to pre-dredge levels after 12 months.

ANNO

06/10/1987

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ACC 885
TYPE
YEAR 1972
AUTH JOLLEY, J.;
TITL EXPLORATORY FISHING FOR THE SUNRAY VENUS CLAM, MACROCALLISTA NIMBOSA, IN NORTHWEST FLORIDA.

BIBL FLORIDA DEPARTMENT OF NATURAL RESOURCES, MARINE RESOURCES LABORATORY, ST. PETERSBURG, FL.

KEYW MOLLUSCA PELECYPODA BENTHIC FAUNA
 COMMERCIAL FISHERY POPULATION DENSITY

ABST An exploratory fishing project designed to locate commercially harvestable populations of sunray venus clams, *Macrocallista nimbosa*, was carried out from November 1969 to April 1970 along Florida's west coast. Physical data recorded included water depth, temperature, salinity, secchi disc depth, and bottom type. Catch of venus clams was reported. Taxonomic determinations of associated fauna were made.

ANNO

06/10/1987

.....
ACC 224
TYPE
YEAR 1973
AUTH JONES, J.I.; ET AL.;
TITL PHYSICAL OCEANOGRAPHY OF THE NORTHEAST GULF OF MEXICO AND FLORIDA CONTINENT
AL SHELF AREA.

IN: J.I. JONES, R.E. RING, M.O. RINKEL, AND R.E. SMITH, EDS. A SUMMARY
OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.
BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBU
RG, FL. 69 PP.

KEYW CIRCULATION	CONTINENTAL SHELF	CURRENTS
OCEANOGRAPHY	TIDE	UPWELLING
WATER MASS	PHYSICAL OCEANOGRAPH	

ABST

ANNO

06/10/1987

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ACC 566

TYPE

YEAR 1975

AUTH JONES, P.H.;

TITL GEOTHERMAL AND HYDRODYNAMIC REGIMES IN THE NORTHERN GULF OF MEXICO BASIN.

BIBL PROCEEDING 2ND U.N. SYMPOSIUM ON THE DEVELOPMENT AND USE OF GEOTHERMAL RESOURCES 3:15-89.

KEYW GEOLOGY

SEDIMENTATION

GEOTHERMAL

SEDIMENT

RESOURCE

ABST

ANNO

06/10/1987

.....
ACC 2168
TYPE P
YEAR 1963
AUTH JONES, A.C.;
TITL DISTRIBUTION OF PINK SHRIMP LARVAE (PENAEUS DUORARUM BURKENROAD) IN SOUTH
FLORIDA.

BIBL INT. CONGR. ZOOL. PROC. 16. P. 105.

KEYW DISTRIBUTION PINK SHRIMP ZOOGEOGRAPHY
 TEMPERATURE CURRENTS

ABST The distribution of pink shrimp larvae on the southern Florida shelf was studied to determine their dispersion from an area of spawning. Variations in numbers of larvae exhibited in space and time were evaluated by an analysis of variance model with a factorial arrangement of the variables (month of collection, geographic area, and age of the larvae). The numbers of larvae in time were related to the annual temperature cycle. The numbers increased rapidly with rising temperature in spring, fluctuated about a high level in summer, decreased with falling temperature in autumn, and fluctuated about a low level in winter. Larvae were unequally distributed in the geographical area of study. The resultant water currents were shown to be of insufficient magnitude to transport larvae to the coastal estuaries. Migration can be accompanied by the larvae only by moving with the flood stream of tidal currents.

ANNO

06/10/1987

.....
ACC 2430
TYPE P
YEAR 1963
AUTH JONES, J.A.;
TITL ECOLOGICAL STUDIES OF THE SOUTHEASTERN FLORIDA PATCH REEFS. PART I. DIURNAL AND SEASONAL CHANGES IN THE ENVIRONMENT.

BIBL BULL. MAR. SCI. GULF & CARIBB. 13(2):282-307.

KEYW MONROE	REEF	TEMPERATURE
SALINITY	DISSOLVED OXYGEN	NUTRIENT
CURRENTS	PRIMARY PRODUCTIVITY	

ABST The environmental conditions of the patch reefs in southeastern Florida were described. Water temperature was found to vary approximately 0.5 to 1.5 degrees C diurnally, generally in response to air temperature fluctuations and solar radiation. Salinity was determined to be relatively stable at 37 parts per thousand, modified slightly by precipitation and evaporation. Other parameters monitored in this study include dissolved oxygen (90-125%), pH (7.6 to 8.2), plant nutrients, current velocity and direction, incident illumination, cloud cover, extinction coefficients and primary productivity.

ANNO

06/10/1987

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ACC 4074

TYPE P

YEAR 1973

AUTH JONES, J.I.;RING, R.E.;RINKEL;SMITH, R.E., EDS.;

TITL A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA INSTITUTE OF OCEANOGRAPHY, ST.
PETERSBURG, FL.

KEYW METEOROLOGY

PHYSICAL

OCEANOGRAPHY

BIOLOGY

GEOLOGY

CHEMISTRY

SOCIOECONOMIC

ABST This report represents a compilation and evaluation of selected studies of the significant natural and artificial environmental characteristics of the eastern Gulf of Mexico. It has been prepared by a group of qualified scientists collectively conversant with the major environmental aspects of the subject region. The purpose of this report is to provide an overview of the current status of knowledge and information on past and ongoing studies which are significant for a more complete understanding of the environment and ecology of this area. Selected investigations have been utilized by the respective authors, and there has been no attempt to list or discuss all studies within the area. Each section of this report has been compiled and written as a "report within a report" and is meant to stand alone as a distinct scientific document or statement.

ANNO

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ACC 223
TYPE
YEAR 1973
AUTH JORDAN, C.L.;
TITL CLIMATE

IN: J.I. JONES, R.E. RING, M.O. RINKEL, AND R.E. SMITH, EDS. A SUMMARY
OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBU
RG, FL. 22 PP.

KEYW CLIMATIC DATA CLIMATOLOGY PRECIPITATION
 STATISTICS TEMPERATURE METEOROLOGY

ABST Climatological data from coastal stations and summaries of meteorological o
bservations from ships are used to describe the broad climatic features of
the eastern Gulf of Mexico. The seasonal changes in wind, temperature, clou
diness, and precipitation are related in a general way to the character of
the large-scale circulation patterns and the associated seasonal changes in
storm tracks and air masses. Statistical information is presented for sele
cted coastal stations and for a summary area in the east-central Gulf for a
number of climatological elements including rainfall, thunderstorms, fog,
winds, and waves. Information is also provided on the frequency and seasona
l distribution of tropical and extra-tropical cyclones in selected areas, a
nd data are given on maximum hurricane surge heights for the region. Data s
ources and reliablility are discussed in relation to the possibility of pro
viding more detailed climatological information for the eastern Gulf.

ANNO

06/10/1987

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ACC 4075
TYPE P
YEAR 1959
AUTH JORDAN, G.F.; STEWART, H.B., JR.;
TITL CONTINENTAL SLOPE OFF SOUTHWEST FLORIDA.

BIBL AM. ASSOC. PETROL. GEOL. BULL. 43(5):974-991.

KEYW SEDIMENT	GEOLOGY	GEOPHYSICAL
REEF	CONTINENTAL SLOPE	CONTINENTAL SHELF

ABST Recent surveys of the west Florida continental slope made by the Coast and Geodetic Survey show for the first time the detailed topography of the southern part of this area. A marked change in topography at 27 degrees North latitude separates the northern from the southern part of the slope and is related to north-to-south changes from clastic to non-clastic underlying bedrock and from thick to thin or non-existent overburden of unconsolidated sediments. A drowned barrier spit and lagoon unchanged by subsequent erosion or deposition were revealed at 75-100 fathoms. These features are described and discussed along with numerous long breaks in slope, embayments, and offsets in the steep lower slope, reef patches, dome-like structures, and spur-shaped ridges.

ANNO

06/10/1987

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ACC 340
TYPE
YEAR 1983
AUTH JOSS, J.W.; MARAK, R.R.;
TITL MARMAP (MARINE RESOURCES MONITORING, ASSESSMENT, AND PREDICTION) PLANKTON SURVEY MANUAL.

BIBL NATIONAL MARINE FISHERIES SERVICE, NORTHEAST FISHERIES CENTER, WOODS HOLE, MA. NOAA-TM-NMFS-F/NEC-21. 278 PP.

KEYW	BIOLOGY	FISHERY	FOOD CHAIN
	MORTALITY	OCEANOGRAPHY	CONTINENTAL SHELF
	PLANKTON	ICHTHYOPLANKTON	

ABST

ANNO

06/10/1987

.....
ACC 2023
TYPE P
YEAR 1966
AUTH JOYCE, E.A., JR.; ELDRED, B.;
TITL THE FLORIDA SHRIMPING INDUSTRY.

BIBL FLORIDA BOARD CONSERVATION MARINE LABORATORY, EDUCATIONAL SERVICE
NUMBER 15. 47 P.

KEYW BROWN SHRIMP	PINK SHRIMP	LIFE HISTORY
GROWTH	MIGRATION	MORPHOLOGY

ABST Florida's commercial shrimp industry is based on 3 species of shrimp: *Penaeus fluviatilis* (white shrimp); *P. aztecus* (brown shrimp); and *P. duorarum* (pink shrimp). All three species have similar life histories and overlapping ranges. Morphological and growth characteristics and spawning periods and seasonal migrations of each species are summarized. Information on commercial shrimping for food and bait shrimp, including catch sizes, types of trawls, production of shrimping areas, importance of minor shrimp species, and effectiveness of conservation regulations is reviewed. The potential, methods and problems for shrimp farming in Florida are discussed.

ANNO

06/10/1987

.....
ACC 4076
TYPE P
YEAR 1969
AUTH JOYCE, E.A., JR.; WILLIAMS, J.;
TITL RATIONAL AND PERTINENT DATA. MEMOIRS OF THE HOURGLASS CRUISES. VOL. I, PART I.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 50 P.

KEYW HOURGLASS HYDROGRAPHY BIOLOGY
 BENTHIC CONTINENTAL SHELF

ABST This paper describes in detail the rationale, cruise patterns, stations, gear, sampling procedures, and methods of specimen handling, and presents all the hydrographic data accumulated during the 28 months of the Hourglass program (August 1965-November 1967). The Hourglass cruises were conducted by the Marine Research Laboratory of the Florida Board of Conservation and represent one of the few major systematic biological sampling programs undertaken on the continental shelf of the Gulf of Mexico. Volume I, Part I is the first in a new series of Laboratory publications which will deal with results obtained from the Hourglass program. This issue is designed to make the basic data available and to eliminate needless repetition in succeeding volumes.

ANNO

06/10/1987

.....
ACC 2024
TYPE P
YEAR 1976
AUTH JUHL, R.;DRUMMOND, S.B.;
TITL SHRIMP BYCATCH INVESTIGATIONS IN THE UNITED STATES OF AMERICA. A STATUS RE
PORT.

BIBL NOAA, NMFS, SE FISH. CTR. REPT. P. 213-226.

KEYW SHRIMP	FISHERY	PINK SHRIMP
BROWN SHRIMP	SHRIMP FISHERY	

ABST Preliminary results from an NMFS shrimp bycatch investigation were presented in this report. *Penaeus aztecus*, *P. duorarum*, and *P. setiferus* were reported to make up the bulk of the catch. The center of the shrimp fishery was found to be in the Gulf of Mexico and along the SE seaboard of the U.S. The average annual catch of penaeids was determined and explanations were presented for variations.

ANNO

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ACC 73

TYPE

YEAR 1980

AUTH KAHN, J.H.;

TITL THE ROLE OF HURRICANES IN THE LONG TERM DEGRADATION OF A BARRIER ISLAND CHAIN: CHANDELEUR ISLANDS, LA.

BIBL MASTER'S THESIS. LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE, BATON ROUGE, LA. 97 PP.

KEYW	EROSION	GEOMORPHOLOGY	HURRICANE
	METEOROLOGY	PHYSICAL PROCESS	BARRIER ISLAND
	SEDIMENT TRANSPORT	SEDIMENT	

ABST Study of the morphological impact of Hurricane Frederic in 1979 affirmed that hurricanes function as the primary mechanism of land loss and migration of the Chandeleur Islands, Louisiana. Storm response/recovery patterns were examined through repeated aerial and ground reconnaissance in the three months following Frederic, and by comparison of pre- and post-storm aerial photographs. Frederic cut more than 40 major channels through the Chandeleurs, and severely eroded Gulf-side beaches. Following Frederic there was rapid recovery from temporary storm-induced morphological changes. Frederic's greatest impact was in the southern half of the study area, where wave attack permanently destroyed a strip of mangrove marsh, 50-100 m wide, at the beach-marsh interface. Measurements from historical charts indicate an average long-term Gulf shoreline erosion rate of approximately 10 m/yr at the study area's northern and southern ends, about twice the erosion rate in the arc's central portions. An estimated 50-90% of the net shoreline erosion in this century has resulted from the 23 hurricanes that have made landfall in this region since 1900. The subaerial extent of the north-central segment of the study area doubled between 1885 and 1969, while all other barrier segments lost land. Results of this study suggest that shoreline orientation, sediment type, and pre-storm geomorphology are the main determinants of barrier island storm response and post-storm recovery. The north-central segment of the arc is maintaining its subaerial profile by revegetation of washover deposits to form new land in Chandeleur Sound.

ANNO

06/10/1987

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ACC 845
TYPE
YEAR 1974
AUTH KAKAREKA, J.P;
TITL A STUDY OF ORGANIC POLLUTANT TRANSFER PROCESSES IN THE ESTUARINE ENVIRONMEN
T.

BIBL MASTER'S THESIS. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 96 PP.

KEYW PESTICIDE	PHthalATES	POLLUTION
TRANSPORT	ESTUARY	PHYSICAL PROCESS

ABST Levels of DDT, DDE, DDD, PCB's and phthalates were determined for sediment, suspended matter and water in the Mississippi River delta and near shore areas of the northern Gulf of Mexico. Water samples were collected at 30 stations and sediment samples at 16 stations during a July, 1973 cruise by the R/V Longhorn and a May and June, 1974 cruise by the R/V Gyre.

ANNO

06/10/1987

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ACC 2266

TYPE P

YEAR 1967

AUTH KELLY, J.A., JR.; DRAGOVICH, A.;

TITL OCCURRENCE OF MACROZOOPLANKTON IN TAMPA BAY, FLORIDA, AND THE ADJACENT GULF OF MEXICO.

BIBL FISH. BULL. 66(2):209-221.

KEYW ZOOPLANKTON

TEMPERATURE

SALINITY

ABST A year of sampling in Tampa Bay indicated that decapod crustaceans accounted for 87% of the total number of zooplankton collected. The dominant organisms included *Lucifer faxoni*, larval porcellanids, brachyurans, chaetognaths, copepods, larval polychaetes, carideans, appendicularids, larval fish, t halassinids, cladocerans and larval stomatopods. It was determined that low temperature and salinity values were more restrictive than high ones to most of the organisms.

ANNO

06/10/1987

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ACC 4272

TYPE P

YEAR 1983

AUTH KELLER, C.E.; ADAMS, J.K. (EDS.);

TITL PROCEEDINGS OF A WORKSHOP ON CETACEANS AND SEA TURTLES IN THE GULF OF MEXICO:
O: STUDY PLANNING FOR EFFECTS OF OUTER CONTINENTAL SHELF DEVELOPMENT.

BIBL FISH AND WILDLIFE SERVICE, WASHINGTON, DC. 47 P.

KEYW CETACEAN

TURTLE

PETROLEUM

ENDANGERED SPECIES

ABST The purpose of the workshop was to assemble scientists knowledgeable about cetaceans, sea turtles, and the Gulf of Mexico to discuss the potential impacts of offshore oil and gas development on these animals and make recommendations for future research. The workshop began with brief presentations about the environment of the Gulf of Mexico and the cetaceans and sea turtles found there, and a review of petroleum effects on these animals. The following points were then discussed: (1) ways in which cetaceans and sea turtles have been or could be affected, either directly or indirectly by activities and events associated with offshore oil and gas development were identified; (2) the types and specificity of data needed to predict, detect, and mitigate possible adverse effects were identified; (3) the advantages and disadvantages of various methods that might be used to obtain needed data were discussed; and (4) specific research and monitoring programs that would be required to obtain needed data, including the necessary expertise, level of effort, equipment, and facilities were identified.

ANNO

06/10/1987

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ACC 797

TYPE

YEAR 1983

AUTH KENDALL, D.R.;

TITL THE ROLE OF PHYSICAL - CHEMICAL FACTORS IN STRUCTURING SUBTIDAL MARINE AND
ESTUARINE BENTHOS.

BIBL U.S. ARMY CORPS OF ENGINEERS, WATERWAYS EXPERIMENT STATION, VICKSBURG, MS.
DRAFT TECHNICAL REPORT EL-83.

KEYW INVERTEBRATA

BENTHIC COMMUNITY

BIOLOGY

CURRENTS

ESTUARY

SALINITY

SEDIMENT

TEMPERATURE

ABST

ANNO

06/10/1987

.....
ACC 4199

TYPE P

YEAR 1983

AUTH KENNICUTT, M.C., II;KENNEY-KENNICUT, W.L.;BRESLEY, B.J.;FENNER, F.;

TITL THE USE OF PYROLYSIS AND BARIUM DISTRIBUTIONS TO ASSESS THE AREAL EXTENT OF
DRILLING FLUIDS IN SURFICIAL MARINE SEDIMENTS.

BIBL ENVIRON. GEOL. 4(3-4):239-249.

KEYW BARIUM
DRILLING MUD

DRILLING FLUID

SEDIMENT

ABST

ANNO

06/10/1987

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ACC 4300

TYPE P

YEAR 1983

AUTH KENNEDY, E.A.; PEQUEGNAT, W.E.; HUBBARD, G.F.; JAMES, B.M.; POTTER, C.M.;

TITL ECOLOGICAL EFFECTS OF ENERGY DEVELOPMENT ON REEF FISH, ICHTHYOPLANKTON AND BENTHOS POPULATIONS IN THE FLOWER GARDEN BANKS OF THE NORTHWESTERN GULF OF MEXICO, 1980-1982. VOL. 1. ECOLOGICAL SURVEY OF THE MACROINFAUNAL COMMUNITY NEAR THE FLOWER GARDEN BANKS.

BIBL FINAL REPT. SCIENCE APPLICATIONS, INC., OAK RIDGE, TN. REPT. NO. NOAA-83120 104.

KEYW FISH

ICHTHYOPLANKTON

INFAUNA

OIL AND GAS

CONTINENTAL SHELF

DRILLING

SEDIMENT

ABST This research project was developed with the overall objective of assisting in the assessment of possible impacts of oil and gas exploit on the biota of the Flower Garden Banks, which are located on the outer continental shelf of the northern Gulf of Mexico. No definitive evidence was obtained from this study that drilling either at Platform A or at Platform B produced any significant impacts upon sediment texture, TOC, or the associated macroinfauna.

ANNO

06/10/1987

.....
ACC 2431
TYPE P
YEAR 1972
AUTH KERR, S.D., JR.;
TITL PATTERNS OF COASTAL SEDIMENTATION: CARBONATE MUDS OF FLORIDA BAY.

BIBL BULL. AM. ASSOC. PETROL. GEOL. 56(3):632 (ABSTRACT).

KEYW MONROE CARBONATE SEDIMENT
DISTRIBUTION

ABST The accumulation of carbonate muds into distinct sedimentary patterns within Florida Bay was examined. The physiography of the accumulation was determined by hydrological processes which also regulate local faunal distributions. Characteristics of the most common sedimentary patterns, banks and lakes, were summarized and their historical formations were discussed.

ANNO

06/10/1987

.....
ACC 1055

TYPE

YEAR 1974

AUTH KETCHUM. B.H.;

TITL MOVEMENT OF HEAVY METALS AND ORGANHALOGENS THROUGH FOOD CHAINS AND THEIR EF
FECTS ON POPULATIONS AND COMMUNITIES.

IN: A.D. MCINTYRE AND C.F. MILLS, EDS. ECOLOGICAL TOXICOLOGY RESEARCH.
P. 285-300.

BIBL PLENUM PRESS, NEW YORK, NY.

KEYW BIOACCUMULATION
COASTAL WATER
PESTICIDE

BIOLOGY
ECOLOGY
POLLUTION

BIOMAGNIFICATION
HEAVY METAL

ABST The effects of chemical pollutants on populations and communities are discu
ssed.

ANNO

06/10/1987

.....
ACC 788

TYPE

YEAR 1965

AUTH KHROMOV, N.S.;

TITL DISTRIBUTION OF PLANKTON IN THE GULF OF MEXICO AND SOME ASPECTS OF ITS SEASONAL DYNAMICS.

BIBL SOVIET - CUBAN FISHERY RESEARCH TRANSLATIONS.

KEYW BIOLOGY

STANDING CROP

PHYTOPLANKTON

SEASONALITY

PRIMARY PRODUCTIVITY

ABST

ANNO

06/10/1987

.....
ACC 2432
TYPE P
YEAR 1981
AUTH KICK, R.;
TITL CARBONATE SEDIMENTS FROM PETERSON KEY BANK, FLORIDA BAY.

BIBL MASTER'S THESIS. UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL.

KEYW MONROE	CARBONATE	SEDIMENT
MOLLUSC	FORAMINIFERA	DEPTH
GRAIN SIZE		

ABST A study of carbonate sediments at Peterson Key Bank, Florida Bay, demonstrated that all sediments are of biological origin, produced predominantly by molluscs, Halimeda, and Foraminifera. Difference in sediment texture was attributed to the mode of sedimentary breakdown by organisms. These organisms and the type of sediment they produce are summarized. The distribution of sediment type was used to determine the recent history of two channels in the bank.

ANNO

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ACC 4077
 TYPE P
 YEAR 1976
 AUTH KINCH, J.E.;O'HARRA, L.E.;
 TITL CHARACTERISTICS OF THE SPORT FISHERY IN THE TEN THOUSAND ISLANDS AREA OF FLORIDA.

BIBL BULL. MAR. SCI. 26(4):479-487.

KEYW COASTAL	FISH	FISHING EFFORT
MANAGEMENT	RECREATIONAL FISHERY	REDFISH
SEA TROUT	SNAPPER	SNOOK
SOCIOECONOMIC	SPORT FISHERY	

ABST This study represents the first in-depth analysis of the sport-fishing catch and effort in the upper Ten Thousand Islands area. It was undertaken to provide comparative observations with similar studies conducted along the southern coastal areas in the Everglades National Park and to provide a basis for future comparisons of fishing pressure upon these resources as the areas' human population grows. The interview data were collected from August 1971 to October 1972. Boat counts from July 1971 to June 1974 were utilized to estimate total sport-fishing effort from boats. The major species caught and the success for the various types of fishermen were established. Seasonality was found to be the major factor in fishing pressure. The charter-guide method was the most successful in catch per unit effort.

ANNO

06/10/1987

.....
ACC 2433
TYPE P
YEAR 1965
AUTH KISSLING, D.L. ;
TITL CORAL DISTRIBUTION ON A SHOAL IN SPANISH HARBOR, FLORIDA KEYS.

BIBL BULL. MAR. SCI. 15:599-611.

KEYW	MONROE	CORAL	DISTRIBUTION
	DEPTH	SUBSTRATE	REEF

ABST The distribution of several coral species living on a shoal in Spanish Harbor, Florida Keys, was correlated with water depth, vegetative growth, and substrate type. Densities of *Porites porites* and *Manicina areolata*, were higher in unconsolidated sediments with dense vegetation which help support their free coralla. *Siderastrea radians*, *S. siderea*, *P. asteroides*, and *Favia fragum* inhabited firm substrata necessary for their attachment. *F. fragum* was least tolerant of unconsolidated sediment and preferred depths greater than 1.5 ft, as did *P. asteroides*. Results were compared with those of other similar studies conducted in the Florida reef tract.

ANNO

06/10/1987

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ACC 2434
TYPE P
YEAR 1977
AUTH KISSLING, D.L.; TAYLOR, G.T.;
TITL HABITAT FACTORS FOR REEF-DWELLING OPHIUROIDS IN THE FLORIDA KEYS.

BIBL PROC. THIRD INTERNAT. CORAL REEF SYMP. P. 225-231.

KEYW MONROE	CORAL	REEF
DEPTH	CURRENTS	SUBSTRATE
DISTRIBUTION	ECHINODERMATA	

ABST A survey of ophiuroid populations on coral reefs in the lower Florida Keys revealed 10 species that exhibit strong habitat preferences. Habitat selection among 7 of the ophiuroid species was determined to be mainly a response to one or more physical habitat factors, possibly related to feeding. The effects of depth, current patterns, and substrates on ophiuroid distribution were determined. The zonation of reef dwelling ophiuroids was coincident with several physiographic habitats.

ANNO

06/10/1987

.....
ACC 338

TYPE

YEAR 1971

AUTH KLIMA, E.F.; WICKHAM, D.A.;

TITL ATTRACTION OF COASTAL PELAGIC FISHES WITH ARTIFICIAL STRUCTURES.

BIBL TRANS. AM. FISH. SOC. 100(1):86-99.

KEYW ARTIFICIAL REEF
FISHERY

BIOLOGY
PELAGIC FISH

COASTAL WATER

ABST

ANNO

06/10/1987

.....
ACC 339

TYPE

YEAR 1972

AUTH KLIMA, E.F.; ROE, R.B.;

TITL REPORT OF THE NATIONAL MARINE FISHERIES, SOUTHEAST FISHERIES CENTER, PASCAGOULA LABORATORY, FISCAL YEARS 1970 AND 1971.

BIBL NATIONAL MARINE FISHERIES, SOUTHEAST FISHERIES CENTER, PASCAGOULA, MS. NOAA -TM-NMFS-SEFC-2. 28 PP.

KEYW AERIAL SURVEY

BENTHOS

BIOLOGY

CONTINENTAL SHELF

FAUNA

REMOTE SENSING

ABST Among the activities of the center reported here are the following: investigations into the application of remote sensors for resource detection using aerial photography, pulsed lasers, spectrophotometry, and low-light-level imagery; assessment surveys along the outer continental shelf and upper continental slopes of the Gulf of Mexico and Caribbean Sea where deep-sea prawns, crabs, and silver hake were taken in quantity. RUFAS, the remote controlled underwater fisheries assessment vehicle was used successfully in benthic shelf explorations. Electrical harvesting gear were planned to increase the efficiency of available gear and to provide the technology for sampling resources presently impossible to harvest.

ANNO

06/10/1987

.....
ACC 2327

TYPE P

YEAR 1979

AUTH KLINGER, T.;

TITL A STUDY OF SEDIMENT PREFERENCE AND ITS EFFECT ON DISTRIBUTION IN LUDIA CLATHRATA SAY (ECHINODERMATA: ASTEROIDEA).

BIBL MASTER'S THESIS. UNIVERSITY SOUTH FLORIDA, TAMPA, FL.

KEYW CHARLOTTE
INFAUNAL

SEDIMENT
ECHINODERMATA

GRAIN SIZE

ABST The influence of sediment grain size, organic content, and infaunal prey density on the distribution of a population of the sea star, *Luidia clathrata*, was investigated in Charlotte Harbor, Florida. The distribution of *L. clathrata* was not significantly affected by substratum variations, presumably due to the homogeneity of sediment characteristics. Laboratory observations revealed a negative response of the sea stars to organic level; however, field populations exhibited no such response, probably due to differences in the relative organic concentrations in the water column.

ANNO

06/10/1987

.....
ACC 4078
TYPE P
YEAR 1981
AUTH KOBLINSKY, C.J.;
TITL THE M2 TIDE ON THE WEST FLORIDA SHELF.

BIBL DEEP-SEA RES. 28A(12):1517-1532.

KEYW CIRCULATION	CURRENTS	HYDROGRAPHY
BOTTOM PRESSURE	PHYSICAL	OCEANOGRAPHY
TIDE	NUMERICAL MODEL	

ABST The M2 tide on the West Florida Shelf was analyzed with data from five arrays of current meter and bottom pressure sensors spanning a 2-year period. The observations of the tidal fluctuations are consistent with a linear barotropic flow model. Internal tides do not contribute significantly to the variance. Consequently, the tidal currents do not change substantially (plus or minus 25%) over the course of a year and the temperature fluctuations are caused by horizontal advection of the mean thermal gradients. Estimates of energy flux onto the shelf revealed that energy propagates at an angle oblique to the wave crests. The dissipation of tidal energy occurs primarily near shore (depth <50 m), where the quadratic drag law for bottom friction with drag coefficient $\gamma = 0.002$ underestimates the observed dissipation rate. The energy loss over the mid-shelf region is small and consistent with a drag coefficient of 0.002. A one-dimensional model was developed to predict tidal sea level and current amplitudes across the shelf. The model requires only the coastal sea level and the cross-shelf topography. Results of the model are consistent with the observed tidal coefficients.

ANNO

06/10/1987

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ACC 4261
TYPE P
YEAR 1979
AUTH KOBLINSKY, C.J.;
TITL TIDES ON THE WEST FLORIDA SHELF.

BIBL PH.D. THESIS. OREGON STATE UNIVERSITY.

KEYW TIDE	CURRENTS	DEPTH
CIRCULATION	PHYSICAL OCEANOGRAPH	

ABST 4153

ANNO

06/10/1987

.....
ACC 2110
TYPE P
YEAR 1976
AUTH KOENIG, C.C.;LIVINGSTON, R.J.;CRIPE, C.R.;
TITL BLUE CRAB MORTALITY: INTERACTION OF TEMPERATURE AND DDT RESIDUES.

BIBL ARCH. ENVIR. CONTAM. TOXICOL. 4:119-128.

KEYW BLUE CRAB	DECAPOD	TEMPERATURE
MORTALITY	STRESS	PESTICIDE

ABST Serial observations of DDT-contaminated and uncontaminated waters in the northern Gulf of Mexico were made. Blue crab mortalities observed in the DDT-contaminated marsh during the period were correlated with reduced daily temperature minima. Gas chromatographic analysis of hepatopancreas and swimmeret muscle tissues of dead and dying crabs revealed total DDT residue concentrations as high as 39.0 ppm and 1.43 ppm, respectively. It was suggested that the DDT body burdens and reduced temperatures interact to produce acute toxic effects. Several physiological and behavioral mechanisms were proposed.

ANNO

06/10/1987

.....
ACC 4079
TYPE P
YEAR 1980
AUTH KOHOUT, F.A.;MUNSON, R.C.;TURNER, R.M.;ROYAL, W.R.;
TITL SATELLITE OBSERVATIONS OF A GEOTHERMAL SUBMARINE SPRING OFF FLORIDA WEST CO
AST.

IN: M. DUETSCH, D.R. WIESNET, AND A. RANGO, EDS. SATELLITE HYDROLOGY.

BIBL AMERICAN WATER RESOURCES ASSOCIATION. P. 570-578.

KEYW GEOLOGY	LANDSAT	RED TIDE
HYDROGRAPHY	SEDIMENT	REMOTE SENSING
HOLE	SATELLITE	GEOTHERMAL

ABST A geothermal submarine spring location 19 km (12 miles) off the southwest shore of Florida has been recognized by thermal infrared and Landsat imagery. The location of the spring was roughly known from reports of fishermen. As part of research on remote sensing of hydrologic phenomena, an overflight was made by NASA aircraft equipped with a thermal infrared scanner in 1966. A sea surface temperature anomaly was discovered suggesting that the upwelling ground water was warmer than the ambient temperature of the surrounding sea water (about 68 degrees F, 20 degrees C). Ground truth investigation showed that the discharging ground water had a temperature of 96.6 degrees F (36 degrees C) and the same salinity as normal sea water; it was emerging from a sink like depression about 200 ft (60 m) in diameter at a depth of 63 ft (19 m) below sea level. Anomalies have since been found on Landsat MSS bands 4, 5, and 6 that correlated with the fact that the spring periodically throws up a turbidity plume that spreads laterally over the sea surface as much as a kilometer in diameter. This apparently correlates with the name "The Mud Hole" given to the spring by local fishermen. Turbidity plumes at three other locations in Landsat imagery indicate the upwelling phenomenon is widespread and might be involved in triggering Red Tide plankton blooms that occur in this area.

ANNO

06/10/1987

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ACC 4194

TYPE P

YEAR 1976

AUTH KOONS, C.B.;MCAULIFFE, C.D.;WEISS, F.T.;

TITL ENVIRONMENTAL ASPECTS OF PRODUCED WATERS FROM OIL AND GAS EXTRACTION OPERATIONS IN OFFSHORE AND COASTAL WATERS.

BIBL PROC. ANNU. OFFSHORE TECHNOL. CONF. 8(1):247-257.

KEYW PRODUCED WATER

POLLUTION

OFFSHORE DRILING

ABST

ANNO

06/10/1987

.....
ACC 2511

TYPE K

YEAR 1976

AUTH KRANTZ, G.E.;NORRIS, J.P.;

TITL CULTURE OF PINK SHRIMP, PENAEUS DUORARUM AT THE TURKEY POINT EXPERIMENTAL M
ARICULTURE LABORATORY.

BIBL UNIV. MIAMI SEA GRANT TECH. BULL. NO. 36, 36 P.

KEYW DADE

PINK SHRIMP

MARICULTURE

ABST Data from over 45 production hatchery culture attempts and from 49 pond "gr
ow-out" studies were analyzed to determine biological and economic feasibil
ity of growing pink shrimp in Florida. Growth of post larval pink shrimp i
n ponds to a desirable market size required several months more than other
species of shrimp and survival in over 22% of the ponds was less than 30%.
Growth, individual size, and biomass of the shrimp was evaluated. Cost an
alysis indicated research areas which could substantially reduce the total
market place.

ANNO

06/10/1987

.....
ACC 2119

TYPE U

YEAR 1977

AUTH KRITZLER, H.;

TITL ESTIMATION OF BIOMASS OF BENTHIC INVERTEBRATE MACROFAUNA AND IDENTIFICATION
OF POLYCHAETOUS ANNELIDS FOR THE BLM MAFLA EXTENDED BASELINE AND MONITORIN
G STUDY (1975-76). UNPUBL. REPT. U.S. DEPT. OF INT., BLM, WASHINGTON, DC. 39
P. + APPENDIX.

BIBL

KEYW BIOMASS
DEPTH

POLYCHAETE
DIVERSITY

ASSEMBLAGE
MAFLA

ABST This report presents partial results of the biomass and polychaete study of the Bureau of Land Management sponsored program in Mississippi, Alabama, Florida (MAFLA) outer continental shelf. The author summarizes his findings as follows: Homogeneity of sampled polychaete assemblages appeared consistent with evaluation of representativeness (as number of replicates per sample) which was considered inadequate for 17 of 27 samples collected in July 1975. No consistent correlation between biomass and depth was seen. At most stations high polychaete diversity could be correlated with widespread distribution of fine sediment, in itself an indicator of environmental stability. Five types of significantly associated polychaete species groups were detected, affording a basis for classifying the stations. The existence of more than one distinct polychaete assemblage, correlated with the general character of the sediments was demonstrated at some stations.

ANNO

06/10/1987

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ACC 2267

TYPE P

YEAR 1977

AUTH KRUER, C.R.;

TITL A STUDY OF THE BENTHIC ALGAE OF THE NATURAL REEFS OFF TAMPA BAY, FLORIDA GULF COAST.

BIBL MASTER'S THESIS. UNIVERSITY SOUTH FLORIDA, TAMPA, FL.

KEYW BENTHIC
DISTRIBUTION
REEF

ALGAE
TEMPERATURE
CORAL

SEASONALITY
TURBIDITY

ABST A total of 149 taxa of benthic marine algae including 37 Chlorophyta, 1 Chrysophyta, 18 Phaeophyta, 83 Rhodophyta, and 10 Cyanophyta were collected on or near to rocky outcroppings offshore from Tampa Bay, Florida. Five species and a possible sixth were new distributional records for the Gulf of Mexico, and 8 were range extensions into central west Florida and the eastern Gulf. The species composition, seasonality, and zonation of this flora as well as the effects of grazing on its distribution on the reefs were discussed. Physical factors which may influence the seasonality and distribution of the algae were presented and compared to other areas. The economic value of these reefs to the west coast of Florida was discussed relative to the commercial and recreational fisheries that are dependent upon the reefs.

ANNO

06/10/1987

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ACC 2198

TYPE P

YEAR 1981

AUTH KULCZYCKI, G.R.;VIRNSTEIN, R.W.;NELSON, W.G.;

TITL THE RELATIONSHIP BETWEEN FISH ABUNDANCE AND ALGAL BIOMASS IN A SEAGRASS DRIFT ALGAE COMMUNITY.

BIBL ESTUAR. COAST. MAR. SCI. 12(3):341-348.

KEYW FISH

DRIFT ALGAE

ABUNDANCE

SEAGRASS

BIOMASS

ABST Monthly drop net samples and 18 daily seine collections from a seagrass bed in Indian River, Florida indicated that abundances of both the code goby *Gobiosoma robustum* and the Gulf pipefish *Syngnathus scovelli* increased with increases in drift algae biomass. It is suggested that this relationship is due to the increased effectiveness of drift algae as a food source and refuge from predators.

ANNO

06/10/1987

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ACC 510

TYPE

YEAR 1970

AUTH KUPPER, D.H.;

TITL THE GEOLOGY AND TECHNOLOGY OF GULF COAST SHELF.

BIBL LOUISIANA STATE UNIVERSITY, SCHOOL OF GEOSCIENCE, MISCELLANEOUS PUBLICATION
70(2):1-118.

KEYW CONTINENTAL SHELF
OIL

GEOLOGY
SEDIMENT

RESOURCE
TECTONIC

ABST

ANNO

06/10/1987

.....
ACC 767

TYPE

YEAR 1966

AUTH KUTKUHN, J.H.;

TITL THE ROLE OF ESTUARIES IN THE DEVELOPMENT AND PERPETUATION OF COMMERCIAL SHRIMP RESOURCES.

IN: R.F. SMITH, A.H. SWARTZ, AND W.H. MASSMAN, EDS. A SYMPOSIUM ON ESTUARINE FISHERIES. P. 16-36.

BIBL AM. FISH. SOC. SPEC. PUBL. 3.

KEYW BIOLOGY

COMMERCIAL FISHERY

LIFE HISTORY

SHRIMP

SPECIES COMPOSITION

MIGRATION

SHRIMP FISHERY

ESTUARY

ABST This report summarizes knowledge concerning functional relationships between the estuarine environment and commercial shrimp resources. Discussion is largely restricted to North America species, especially the rapidly developing Gulf coast.

ANNO

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. The includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.

